

Pyle

PRELIMINARY REPORT

AT SEA SURVEY

MAY - JUNE 1967

LEEWARD ISLANDS #19

Prepared by Robert L. DeLong

Leewards Island Survey # 19
Preliminary Report, At-Sea Survey
May - June 1967

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This report summarizes at-sea observations by Smithsonian personnel during Leeward Island Survey 19, 23 May - 14 June, 1967. Excellent cooperation was received from officers and crew of the light tugs.

After departing Honolulu May 23, a stop was made at French Frigate Shoals to disembark personnel (Amerson and Lewis) and their gear on 25 May. On 26 May, Gardner Pinnacles was visited and on 28 May a stop was made at Pearl and Hermes Reef. From there the vessels proceeded directly to Midway Island for refueling, and returned to Pearl and Hermes on 30 May. The vessels moved to Lisianski June 1-2, moved on to Laysan June 6-7, and departed Laysan June 12, arriving in Honolulu June 15.

Interisland and off shore (within 2 miles of land) observations are incomplete as preparations were being made for island landings. No collecting at sea was done on this survey. Loran and celestial fixes were used throughout the trip. Weather was generally good throughout the survey.

In ten days (23-25, 26*-28* 30* May, and 12 - 14 June), 82.4 hours of observations over 1054 diurnal miles were covered. During this period, 4623 birds of 19 species were recorded, after eliminating presumed duplicate sightings from the two ships. Simultaneous observations were conducted from two ships during 5 days (24 - 28 May) of the outbound leg, totaling 40.8 hours and covering 421 miles. The vessels were side-by-side and separated four miles to test the basic assumption that two independent observers traveling the "same" track will see the same birds. On the return trip, diurnal observations were shared by the two vessels with the observing vessel always in the leading position. These separate observations were then lumped to give daily totals.

Discussion: By using identical vessels and operating over the "same" waters at the same times, we have eliminated many of the variables encountered in comparison of at-sea observations taken at different times, under varying conditions.

As can be seen from table 3, daily totals show large variances between observers on the two ships. The large discrepancies generally lie in the number of flocks seen by the independent observers, i.e. one observer records a flock of Sooty Terns and Wedge-tailed Shearwaters that is not visible to the other observer, thus increasing his total birds well above the other observer.

Probably more comparable is the number of species seen each day by the two observers. As seen from table 3, this number does vary between observers. During the 5-day test period, observers on Vessel A saw two sea bird species not recorded on Vessel B, and Vessel B recorded four sea bird species and two accidental species not recorded by Vessel A. These non-mutually observed species were usually a single sighting of sometimes a few birds, thus may not be as significant as they appear. However, there remains a difference;

* Partial days of observation.

it represents 24 o/o of the total species recorded by Vessel B. This percentage figure makes the difference appear too significant unless the observer is interested in every possibility of species occurrence. If so, in this case two independent observers did not record the same species.

Why did not both observers record all of the same birds? It is a matter of distribution. An example: If we use a three foot square sample plot and spread, randomly, 30 red and 30 blue marbles and two green and two yellow marbles on this sample plot, any two similar transects will probably sample representatively the common marbles (red and blue) but probabilities are slight that both transects will sample the uncommon marbles (green and yellow). Thus it is with sampling bird populations. Both observers record representative numbers of common birds species, but uncommon species of low density may not be recorded by both observers.

Secondly, there is variance between observers. Observers vary in quality, but perhaps more important, individual observers vary through time. Extended periods of observations "dull" an observer. Two observers on duty can, and often do, cause mutual distraction and at times an observer may not fee up to normal. All of these lessen the uniformity, and hence the quality of the observations.

In species accounts that follow, species totals for the cruise include, for the periods duplicate observations, only the observations from Vessel A.

Laysan Albatross

31

Low albatross numbers are believed to result from recording techniques used for ship followers. By convention, only the daily high numbers are recorded as daily totals (This assumes that the ship followers accumulate during the day). Albatross do not follow for extended periods the small vessels used on this survey. Hence, the totals recorded are low and not indicative of actual densities. One concentration of 16 birds was recorded on 30 May between Midway and Pearl and Hermes.

Black-footed Albatross

72

The greater number of this species recorded over Laysan Albatross probably indicates this species' greater tendency to follow ships. These numbers are low for reasons outlined in the preceeding account and are believed not to reflect actual densities.

Wedge-tailed Shearwater

1766

Ten dark phase birds were recorded, primarily in the main Hawaiian Islands. Only one dark phase bird was recorded in the western leeward island area. Dark phase birds were also uncommon among the breeding populations present in the western leeward islands. This species represented 38.2°/° of total birds observed. They were found commonly in feeding flocks as usual.

Buller Shearwater

1

One bird was recorded on 30 May at 28° N, 177°18' W.

Sooty Shearwater

4

Only four birds were recorded. Three of them were in the main Hawaiian Islands and one recorded between Midway and Pearl and Hermes Reef.

Newell Shearwater

27

All but one of these birds were recorded off the south end of Niihau Island. The birds were feeding there in late evening.

Christmas Shearwater

2

The two birds were recorded enroute to French Frigate Shoals. As on last June's cruise, no birds were recorded at sea over the western leewards where they are breeding and on eggs at this time.

Dark-rumped Petrel

1

Only one bird was positively recorded as this species, near Niihau on 24 May.

Bonin Petrel

47

The majority (38) of these birds were recorded 27 May while passing 60 miles offshore of Lisianski Island.

Bulwer Petrel

128

Main concentrations were in waters near main Hawaiian Islands. The birds might be breeding here at this time. At-sea numbers are low in western leewards where birds were found on eggs.

Leach/Harcourt Storm Petrel

2

These were recorded only as white rumped storm petrels, and belong to one of the above species.

Red-tailed Tropicbird

8

The low numbers of tropicbirds recorded might have two possible explanations. The birds are normally attracted to larger ships and, like the albatross, do not follow the small ships. Or, the birds were on eggs and spending much of the daytime courting over the islands, thus limiting their pelagic movements.

Blue-faced Booby

30

Small numbers were recorded throughout the cruise with concentrations near Gardner Pinnacle (a breeding area) and in the vicinity of Kaula Rock off Niihau.

Brown Booby

18

Only one bird was recorded in the western leewards. The remaining 17 birds were recorded on 14 June in the vicinity of Niihau.

Red-footed Booby

69

The most abundant booby recorded, because of the 55 observed on 14 June, near Niihau.

Great Frigate

29

Seen in small numbers throughout the entire survey. They were generally associated with feeding flocks.

Pomarine Jaeger

6

All observed offshore of Oahu on 23 May.

Skua

2

Two birds were recorded on 13 June in the vicinity of French Frigate Shoals. Another bird was seen by Vessel B during duplicate observations in the western leewards.

Ruddy Turnstone

15

Eleven birds were recorded off Pearl and Hermes Reef on 28 May, three off the same atoll on 30 May and one off Laysan Island on 12 June.

Wandering Tattler

1

One bird was seen off French Frigate Shoals.

Arctic Tern

3

Three birds were recorded as this species by observers on Vessel B during duplicate observations.

Sooty Tern

1447

This species represented 31.9 percent of the total birds recorded (second only to Wedgetails).

Recorded densities were highest in the western leeward islands where there are large breeding colonies. Daily numbers were not as high as might be expected, but probably represent normal pelagic numbers. Had offshore observations (within 2 miles of land) been taken, totals would have been much higher. All birds recorded were adults.

Gray-backed Tern

57

Small numbers were recorded in the western leewards, but nearly half of the total were recorded near Niihau on 14 June.

Blue-gray Noddy

4

Four birds were recorded near Gardner Pinnacles on 26 May.

Brown Noddy

189

The species was recorded daily (generally in feeding flocks) in the western leewards. A large concentration of 107 birds (62 percent of the total) was seen on 14 June near Niihau.

Black Noddy

39

Thirty-one of the birds were seen off Pearl and Hermes Reef on 30 May. The remaining birds were seen, a few each day, enroute to Oahu from Laysan Island.

White Tern

185

Regular sightings were recorded in the western leewards. On 30 May, between Midway and Pearl and Hermes, 113 birds were recorded. The majority of these were in feeding flocks, but many were single sightings as well.

TABLE I.

SUMMARY OF NON DUPLICATE OBSERVATIONS

Species	May 23	May 28	May 30	June 12	June 13	June 14	Totals
Laysan Albatross		15	16	2		1	34
Black-footed Albatross		16	30	6	2		54
Sooty Shearwater			1			1	2
Wedge-tailed Shearwater	88	13	61	381	38	189	770
Newell Shearwater					1	26	27
Buller Shearwater			1				1
Christmas Shearwater			1				1
Bonin Petrel			1	7	1		9
Dark rumped Petrel							
L. <u>Pterodroma</u>				1(P.e.e.)		1	2
S. <u>Pterodroma</u>			1			1	2
Bulwer's Petrel	1		1	2	5	50	59
Leach's Petrel							
Storm Petrel sp.							
Shearwater/Petrel						1	1
Procellariidae							
Red-tailed Tropicbird		2	1	1	4		8
Red-footed Booby	3		1	3	2	55	64
Blue-faced Booby			2		3	10	15
Brown Booby						17	17
Booby sp.							
Great Frigatebird		3	1	4	2	2	12
Tern sp.							
Gray-backed Tern		1	5	7	9	24	46
Sooty Tern	74	38	171	209	77	157	726
White Tern		17	113	4		7	141
Arctic Tern							
Sterna sp.						2	2
Brown Noddy	14	1	1	1	5	107	129
Black Noddy		21	31	2	1	5	60
Blue-gray Noddy							
Noddy sp.						1	1
Skua					2		2
Pomarine Jaeger	6						6
Jaeger							
Ruddy Turnstone			3	1			4
Golden Plover							
Wandering Tattler							
Phalarope							
TOTALS	186	127	441	631	152	657	2195
HOURS	2.5	2.2	6.3	11.0	12.3	13.0	47.3
MILES	25	30	74	128	139	145	541

TABLE II.

SPECIES OBSERVATIONS, DUPLICATE OBSERVATION PERIOD, LEEWARDS 19, 24-28 May 1967

DATE	24 May		25 May		26 May		27 May		28 May		TOTALS	
VESSEL	A	B	A	B	A	B	A	B	A	B	A	B
Laysan Albatross			2	4		1	6	37	1	3	9	45
Black-footed Albatross	4		16	41	4	17	10	34	3	3	37	95
Sooty Shearwater												
Wedge-tailed Shearwater	338	345	65	204	300	150	298	175	8	27	1009	901
Newell's Shearwater		3										3
Christmas Shearwater	1	2	1					1			2	3
Bonin Petrel							38	35			38	35
Dark-rumped Petrel												
Bulwer's Petrel	49	46	8	15	4	5	8	1			69	67
Leach's Petrel	1			2				2			1	4
Storm Petrel sp.	2		1								3	
Shearwater/Petrel	363	5	3	1			6				372	6
Red-tailed Tropicbird					1		1	1		1	2	2
Red-footed Booby	8	12	1	3							9	16
Blue-faced Booby				3	15	1	2				17	4
Brown Booby					1						1	
Great Frigatebird	7	4	3	3	8	2	2				20	9
Gray-backed Tern	3				7	8	2				12	8
Sooty Tern	43	133	110	433	521	211	64	22	21	29	759	828
Brown Noddy	7	4	10	14	29	3	15			6	61	27
Black Noddy				1								1
Blue-grey Noddy					4	2					4	2
White Tern	46	58	4	4	9		2	2		1	61	65
Miscellaneous	2		52	2	3		4	3	11	5	72	10
TOTALS	874	612	276	730	906	400	458	314	44	75	2558	2131

TABLE III.

SUMMARY OF DUPLICATE OBSERVATIONS, LEEWARDS 19, 24-28 May 1967

May	24		25		26		27		28		Totals	
Vessel	A	B	A	B	A	B	A	B	A	B	A	B
# Hours	11.3		5.4		9.5		13.6		1.0		40.8	40.8
# Sightings	146	159	84	99	87	65	146	158	22	27	485	508
# Flocks	11	9	2	9	6	4	1	2	2	2	22	26
# Species	13	16	10	15	13	10	13	13	5	8	19	25
Total Individuals	874	612	276	730	904	400	458	314	44	75	2556	2131

Date 24 MAY 67 Ship LT 2087 Cruise No. _____
 Organization SI Recorder 2087

Sunrise: Time 0603 Position: Lat. 21-46, Long. 161-05
 Sunset: Time 1931 Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = _____

Miles travelled from sunrise to sunset = 170

Miles travelled from sunset to 2400 hours = _____

TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
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1.

2.

3.

4.

5.

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	Air Temp.
------	----------	-----------	-----------	----------	-----------	-----------	-----------

0100							
0200							
0300							
0400							
0500							
0600	21-46N	161-05W	095T	23	090	3-5'	75
0700	5135	161-05W					
0800	21-52N	161-26W	095T	23	090	4-6	
0900	38 38	30 214					
1000	22-07N	161-54W	095T	23	090	4-6	26
1100	38	08 214					
1200	22-21N	162-22W	095T	23	090	4-6	24
1300	34	162-35 313					7
1400	22-31N	162-45W	095	21	090	5-6'	
1500	35	37					
1600	22-41N	163-02W	090	25	090	5-6	
1700	35	13 212					
1800	22-51N	163-25W	095	25	090	4-6	
1900	2	3 213					
2000	22-53N	163-50W	093	25	090	2-4	NW
2100							
2200							
2300							
2400							

Date 25 MAY Ship LT 2087) Cruise No. _____
Organization SI Recorder LT 2087

Sunrise: Time 0620 Position: Lat. 23-49N Long. 165-45W

Sunset: Time 1948 Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = _____

Miles travelled from sunrise to sunset = 50

Miles travelled from sunset to 2400 hours = _____

TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
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1.

2.

3.

4.

5.

Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt. Air Temp.

0100						
0200						
0300						
0400						
0500						
0600	23-49N	165-45W	075	15	070	4-5
0700	52 ⁵³	38				
0800	23-55N	166-05W	065	18	065	4-6
0900	-3 ⁵	10 ⁵⁸				
1000	23-50W	166-19-30W	063	14	063	1-2
1100	/	/				
1200	23-50N	166-19-30N	060	10	065	1-2
1300	/	/				
1400	23-50N	166-19-30N	065	10	065	2-4
1500	49					
1600	23-48N	166-22W	064	14	070	1-2
1700	34	27				
1800	23-55N	166-32W	070	12	060	4-5
1900	24-00 ⁵⁵	41	0			
2000	24-05N	166-50W	070	15	065	4-6
2100	24-23N					
2200						
2300						
2400	24-23N	167-12W	070	14	065	1-2

Date 26 MAY Ship LT2087 () Cruise No.
 Organization SI Recorder LT2087

Sunrise: Time 0623 Position: Lat. , Long.

Sunset: Time 2005 Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset = 123

Miles travelled from sunset to 2400 hours =

TIME OF FIX TYPE OF FIX LATITUDE LONGITUDE

1.

2.

3.

4.

5.



123 - 12

Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt.

0100						
0200						
0300						
0400						
0500						
0600	25-15N	167-45W	088	11	090	3-5
0700	8 ²² 25-08N	52 ⁵⁷ 167-59.55W	080	8	100	4-5
0800						
0900						
1000	25-00N	167-59.55W	080	10	100	4-5
1100	02 ⁵² 25-05N	01 ⁵² 168-03W	050	10	070	4-5
1200	11 ⁵⁶ 25-17N	20 ⁵¹ 168-32W	055	10	070	3-5
1300	22 ⁵³ 25-28N	52 ⁵⁴ 169-06W	055	11	070	3-4
1400	30 ⁵² 25-33N	10 ⁵⁴ 169-18W				
1500						
1600	6 ⁵³ 25-39N	28 ⁵³ 170-03W				
1700	9 ⁵³	41 ⁵³				
1800						
1900						
2000						
2100						
2200						
2300						
2400	25-53	170-33W	060	12	070	3-4

17

22
28

45
23
76
13

Date 27 May 67 Ship L1-2087 () Cruise No. _____

Organization SI Recorder L12087

Sunrise: Time 0635 Position: Lat. 26° 27' Long. 171° 45'

Sunset: Time 2022 Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = _____

Miles travelled from sunrise to sunset = 134

Miles travelled from sunset to 2400 hours = _____

TIME OF FIX TYPE OF FIX LATITUDE LONGITUDE

- 1.
- 2.
- 3.
- 4.
- 5.

Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt.

0100						
0200	26-05	170-55	080	10	070	3-4
0300						
0400						
0500						
0600	22-26N	171-41N				
0700	8 3/4	49 3/8				
0800	30	58 3/8				
0900	32	06 3/8				
1000	26-34N	172-18W				
1100	41 3/7	48 3/33				
1200	26-48N	173-21W				
1300	49	11 3/10				
1400	26-50N	173-00W				
1500	53 3/3	12 3/12				
1600	26-56N	173-24W				
1700	59 3/3	36 3/12				
1800	27-02N	173-40W				
1900	5 3/3	53 3/5				
2000	27-04.5N	173-58W				
2100	11 3/3	38 3/20				
2200	27-15N	174-14W				
2300						
2400	27-25N	174-22W				

15
19
4 3/4
8.5

45
21
2 1/6
33

SR - 548 (6647)

SS - #3/5mc - miles 74 miles

1300 -

2000

6.45

12 5mc miles to 1200 48 miles

13

2.2

3

Date MON 28 1967 Ship LT 2007 () Cruise No. _____

Organization SI Recorder Thompson

Sunrise: Time 0647 Position: Lat. 27°38', Long. 175°31'

Sunset: Time _____ Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = _____

Miles travelled from sunrise to ⁰⁹⁰⁰~~sunset~~ = 30

Miles travelled from sunset to 2400 hours = _____

TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
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1.

2.

3.

4.

5.

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
------	----------	-----------	-----------	----------	-----------	-----------

0100						
0200						
0300						
0400						
0500						
0600	27°32'	175°24'				
0700	9'	33'				
0800	40'	42'				
0900	27°42'	175°50'				
1000						
1100						
1200						
1300						
1400						
1500	AT Pearl + Hermes Reef					
1600						
1700						
1800						
1900						
2000						
2100						
2200						
2300						
2400						

Date 30 MAY 67 Ship 472097 () Cruise No. _____

Organization LT2097 Recorder _____

Sunrise: Time _____ Position: Lat. _____, Long. _____

Sunset: Time _____ Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = _____

Miles travelled from sunrise to sunset = 1600 74

Miles travelled from sunset to 2400 hours = _____

TIME OF FIX TYPE OF FIX LATITUDE LONGITUDE

1.

2.

3.

4.

5.

Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt.

0100						
0200						
0300						
0400						
0500						
0600				13		
0700				20		
0800				13		
0900	28 10°	177 24'		13		
1000	06 24	42				
1100	03 23	00 24				
1200	28° N	176 47 W	30	12	120	3-4
1300	02 22	34 10				
1400	28 43 N	176 20 W				
1500	27 52 10	05 21 15				
1600	27 42 1	175 50 1 W				
1700						
1800						
1900						
2000						
2100						
2200						
2300						
2400						

1

24

47

3 171

23

39

15

24

13

3 37

12

15

20

33

15

20

20

20

18

3

21

24 MAY 1967
to Pearl & Hawaii

0600 27°37'
0900 - 27°42'

175 24
175°50']

30°

Date 12 Jan 67 Ship 152087 () Cruise No.

Organization NAVY

Recorder 152087

Sunrise: Time 0632 Position: Lat. , Long.

Sunset: Time 2006 Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

TIME OF FIX TYPE OF FIX LATITUDE LONGITUDE

1. 0830: 25° 33'N, 172° 55'
2. 3.5
3.8
17
3. 4
5.1
13
4. 8
5. 21
13
9 15 4
5.1
15
3.6
18
- Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt.

0100						
0200						
0300						
0400				05		
0500				14		
0600						
0700						
0800	25	02 53				
0900	22	49 54				
1000	29	170-50W				
1100	27	17				
1200	26	171-02W				
1300	23	173				
1400	25-20N	170-41W				
1500	14	33				
1600	25-07N	170-15W				
1700	4	03 21				
1800	25-00N	169-50W				
1900	062	40				
2000	25-11N	169-20W				
2100						
2200	25-21N	169-13W				
2300						
2400						

149

Laysan Albatross	1	1	1 ✓
Pterodroma	1	1	1 ✓
W. T. Shearwater	8, 18, 47	83 + 106 =	189 ✓
Puffin	2 - 15 - 6	23 + 27 =	50 ✓
Shearwater	4 - 1 - 9	14 + 10	24 ✓
W. T. Shearwater	2 - 4	6 + 1	7 ✓
Sooty Tern	10, 2 - 34	46 + 111	157 ✓
H. Frigate	1 - 1	2	2 ✓
RFB	1, 19	20 + 35	55 ✓
H. C. Noddy	11 - 29	40 67	107 ✓
BFB	4	4 + 6	10 ✓
S. Laysan	1	1	1 ✓
H. Noddy	5	5	5 ✓
Noddy Sp	1	1	1 ✓
S. Laysan	2	2	2 ✓
Pterodroma	1	1	1 ✓
B. Booby	1	1 + 16 =	17 ✓

251

26 ✓
1 ✓

~~655~~
657

Newell's
Sooty/S/b S Laysan

Date 23 May 67 Ship LT 2086 () Cruise No. _____

Organization _____ Recorder _____

~~Sunrise~~: Time 1412.5 ^{Don't PH} Position: Lat. _____, Long. _____

Sunset: Time 1909 Position: Lat. 21° 19' N, Long. 158° 48'

Miles travelled from 0000 hours to sunrise = 0

Miles travelled from sunrise to sunset = 48

Miles travelled from sunset to 2400 hours = 60

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0300	RADAR	21° 27' N	160° 32' W
2.	0433	RADAR	21° 37' N	160° 49' W
3.				
4.				
5.				

Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt.

0100						
0200						
0300						
0400						
0500						
0600						
0700						
0800						
0900						
1000						
1100						
1200						
1300						
1400						
1500						
1600	21° 12' N	158° 15' W				
1700						
1800	21° 16' N	158° 28' W				
1900						
2000	21° 20' N	159° 03' W				
2100						
2200	21° 25' N	159° 32' W				
2300						
2400	21° 28' N	159° 53' W				

Date 24 May Ship ET 2086 () Cruise No.

Organization Recorder

Sunrise: Time 0603 Position: Lat. 21-45, Long. 161-07

Sunset: Time 1931 Position: Lat. 22-47N, Long. 163-35W

Miles travelled from 0000 hours to sunrise = 75

Miles travelled from sunrise to sunset = 162

Miles travelled from sunset to 2400 hours = 52

TIME OF FIX TYPE OF FIX LATITUDE LONGITUDE

1. 0600 LORAN 21° 47' 161° 15'

2.

3.

4.

5.

Hourly Positions:

Time Latitude Longitude Wind Dir. ~~Wind Sp.~~ Wave Dir. ~~Wave Hgt.~~

0100							
0200	<u>21-28N</u>	<u>160-20W</u>					
0300							
0400	<u>21-35N</u>	<u>160-43W</u>					
0500							
0600	<u>21-47N</u>	<u>161-15W</u>					
0700	<u>54</u>	<u>31</u>					
0800	<u>22-00N</u>	<u>161-47</u>	<u>075 @ 23k</u>	<u>4</u>	<u>080 @ 4-6'</u>	<u>72</u>	<u>76</u>
0900	<u>55</u>	<u>54</u>					
1000	<u>22-10N</u>	<u>162-00W</u>					
1100	<u>12</u>	<u>13</u>					
1200	<u>22-15N</u>	<u>162-19W</u>	<u>075 23</u>	<u>4</u>	<u>025 4-6'</u>	<u>76</u>	<u>78</u>
1300	<u>20</u>	<u>28</u>					
1400	<u>22-24N</u>	<u>162-29W</u>					
1500	<u>28</u>	<u>40</u>					
1600	<u>22-32</u>	<u>162-52W</u>					
1700	<u>40</u>	<u>10</u>					
1800	<u>22-47N</u>	<u>163-27W</u>	<u>075-22</u>	<u>4</u>	<u>025-2-4'</u>	<u>75</u>	<u>72</u>
1900	<u>52</u>	<u>39</u>					
2000	<u>22-56N</u>	<u>163-51W</u>					
2100							
2200	<u>23-07N</u>	<u>164-15W</u>					
2300							
2400	<u>23-10N</u>	<u>164-25W</u>	<u>075-20</u>	<u>4</u>	<u>090-2-4'</u>	<u>72</u>	<u>76</u>

Date 25 MAY Ship LT 2086 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time 0616 Position: Lat. 23-45, Long. 165 44 W

Sunset: Time 1947 Position: Lat. 24 00N, Long. 166 38 W

Miles travelled from 0000 hours to sunrise = 75

Miles travelled from sunrise to sunset = 55

Miles travelled from sunset to 2400 hours = 29

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
--	-------------	-------------	----------	-----------

1.

2.

3.

4.

5.

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	Air	Sea
------	----------	-----------	-----------	----------	-----------	-----------	-----	-----

0100								
0200	23-21 N	164-55 W						
0300								
0400	23-30 N	165-19 W						
0500								
0600	23-43 N	165-41 W	075-15	6	025-2-4	72-74		
0700	45	11-51						
0800	FRENCH	FRIGATE 01	SHOAL					
0900	23-50 N	166-10 W	"					
1000	"	"	"					
1100	"	"	"					
1200	FRENCH	FRIGATE	SHOAL					
1300	"	"	"					
1400	"	"	"					
1500	"	"	"					
1600	FRENCH	FRIGATE 166N	SHOAL					
1700	54	22						
1800	23-58 N	166-30 W	075 10	3	035 2-4	77		
1900	24-02	70						
2000	24-06 N	166-46 W						
2100								
2200	24-15 N	166 58 W						
2300								
2400	24-33 N	167-32 W	075 13	6	025 2-4	70		

Date 26 MAY Ship LT 2086 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time 0622 Position: Lat. 24-49, Long. 167-54

Sunset: Time 2001 Position: Lat. 25-25N, Long. 169-23

Miles travelled from 0000 hours to sunrise = 38

Miles travelled from sunrise to sunset = 99

Miles travelled from sunset to 2400 hours = 50

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0440	CELESTIAL	24-41 N	167 37 W
2.	1315	RADAR	25 05 N	168 13 W
3.	2027	CELESTIAL	25 39 N	169 43
4.				
5.				

Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt.

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
0100						
0200	24-32 N	167-22 W				
0300						
0400	24-40 N	167-33 W				
0500						
0600	24-47 N	167-33 W	078-12	7	030-2-4	70
0700	54	8				
0800	GARDNER	PINACLES				
0900						
1000						
1100						
1200	GARDNER	PINACLES				
1300	25 00 N	168 12 W				
1400	25 08 N	168-23 W				
1500	12	30				
1600	25-16 N	168-47 W				
1700	20	10				
1800	25 29 N	169 13 W	083 20	6	090 2-4	74 75
1900	28	20				
2000	25-33 N	169-38 W				
2100						
2200	25-46 N	170-02 W				
2300						
2400	25-54 N	170 28 W	087 18	4	090 2-4	72 74

Date 27 May Ship LT 2086 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time 0634 Position: Lat. 26-21N Long. 171-45W

Sunset: Time 2023 Position: Lat. 27-08N, Long. 174-10W

Miles travelled from 0000 hours to sunrise = 78

Miles travelled from sunrise to sunset = 122

Miles travelled from sunset to 2400 hours = 30

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0530	CELESTIAL	26-16N	171-31 W
2.	2056	CELESTIAL	27-11 N	174-09 W
3.				
4.				
5.				

Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt.

0100							
0200	26-03 N	170-53 W					
0300							
0400	26-11 N	171-17 W					
0500							
0600	26-18 N	171-37 W	110-17	8	090-2-4	72	73
0700	22	50					
0800	26-27 N	172-03 W					
0900	31	15					
1000	26-38 N	172-28 W					
1100	39	40					
1200	26-43 N	172-53 W	130 18	6	090-2-4	79	73
1300	45	01					
1400	26-48 N	173-10 W					
1500	52	14					
1600	26-55 N	173-28 W					
1700	58	38					
1800	27-01 N	173-48 W	130 15	2	090-2-4	73	74
1900	05	54					
2000	27-08 N	174-01 W					
2100							
2200	27-14 N	174-23 W					
2300							
2400	27-20 N	174-37 W	132 18	2	090-2-4	78	74

Date 28 MAY 67 Ship 172086 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time 0646 Position: Lat. 27-35N, Long. 175-24

Sunset: Time 2033 Position: Lat. 27-43N, Long. 176-00W

Miles travelled from 0000 hours to sunrise = 54

Miles travelled from sunrise to sunset = 25

Miles travelled from sunset to 2400 hours = _____

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
--	-------------	-------------	----------	-----------

1.	0413	CELESTIAL	27-33N	175-10W
----	------	-----------	--------	---------

2.

3.

4.

5.

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
------	----------	-----------	-----------	----------	-----------	-----------

0100						
0200	27-26 N	174 54 W				
0300						
0400	27-30 N	175-07 W				
0500						
0600	27-38 N	175-27 W	178-22	8	070 2-4	70 24
0700	41	35				
0800	27 45	175 43 W				
0900						
1000	PENAL & HERMES	REEF				
1100	"	"	"			
1200	PENAL & HERMES	REEF				
1300	"	"	"			
1400	"	"	"			
1500	"	"	"			
1600	"	"	"			
1700	"	"	"			
1800	PENAL & HERMES	REEF				
1900						
2000	27-43 N	175-58 W				
2100						
2200	27-47 N	176-11 W				
2300						
2400	27-52 N	176-25 W	350-20	7	020-2-4	69

Date 29 May Ship AT 2086 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time 0653 Position: Lat. 28-08N, Long. 177-13W

Sunset: Time _____ Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = 69

Miles travelled from sunrise to sunset = 8

Miles travelled from sunset to 2400 hours = 0

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	<u>0332</u>	<u>Radio</u>	<u>28-05N</u>	<u>177-02W</u>
2.				
3.				
4.				
5.				

Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt.

0100						
0200	<u>27-57N</u>	<u>176-40W</u>				
0300						
0400	<u>28-02N</u>	<u>176-54</u>				
0500						
0600	<u>28-06N</u>	<u>177-08W</u>	<u>125</u>	<u>8</u>	<u>9</u>	<u>245 1-2 11 73</u>
0700						
0800	<u>ATOL</u>	<u>ISLAND</u>				
0900						
1000						
1100						
1200						
1300						
1400						
1500						
1600						
1700						
1800						
1900						
2000						
2100						
2200						
2300						
2400						

Date 30 May 67 Ship LT 2086 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time _____ Position: Lat. _____, Long. _____

Sunset: Time 2027 Position: Lat. 27-46N, Long. 175-4E

Miles travelled from 0000 hours to sunrise = 0

Miles travelled from sunrise to sunset = 90

Miles travelled from sunset to 2400 hours = 0

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	<u>1025</u>	<u>RADAR</u>	<u>28 02</u>	<u>176-57W</u>
2.				
3.				
4.				
5.				

Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt. *Calculator*

0100	<u>MIDW A/</u>					
0200	"					
0300	"					
0400	"					
0500	"					
0600	"					
0700	"					
0800	"					
0900						
1000	<u>28-04N</u>	<u>177-03W</u>				
1100						
1200	<u>27-55N</u>	<u>176-32W</u>	<u>352 22</u>	<u>7</u>	<u>010 4-6 72</u>	
1300						
1400	<u>27-46N</u>	<u>176-11W</u>				
1500						
1600	<u>PENAL</u>	<u>H/CAVES</u>	<u>REEF</u>			
1700	"	"	"			
1800	"	"	"			
1900	"	"	"			
2000	"	"	"			
2100	"	"	"			
2200	"	"	"			
2300	"	"	"			
2400	"	"	"			

30-18

Date 12 June Ship LT 2086 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time _____ Position: Lat. _____, Long. _____

Sunset: Time 2009 Position: Lat. 24-47N Long. 169°35W

Miles travelled from 0000 hours to sunrise = 0

Miles travelled from ^{DEPARTURE} sunrise to sunset = 134

Miles travelled from sunset to 2400 hours = 44

TIME OF FIX TYPE OF FIX LATITUDE LONGITUDE

1. 0802 DEPARTURE LAYSAN ISLAND
2. 2045 CELESTIAL 24.45N 169°27'W
- 3.
- 4.
- 5.

Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt. ^{Temp}

0100	LAYSAN	ISLAND					
0200	"	"					
0300	"	"					
0400	LAYSAN	ISLAND					
0500	"	"					
✓ 0600	LAYSAN	ISLAND					
0700	"	"					
0800	LAYSAN	ISLAND					
0900							
1000	25-26N	171-26W					
1100							
✓ 1200	25-30N	171-11W	115-8KTS	4	090-2-4	80	77
1300	25	71 01					
1400	25-21N	170-51W					
1500	14	34					
1600	25-06N	170-18W					
1700	01	02					
✓ 1800	24-57N	169-55W	100-10KTS	3	090-2-4	80	77
1900	52	45					
2000	24-48N	169-35W					
2100							
2200	24-38N	169-13W					
2300							
✓ 2400	24-30N	168 50	130 7	-	090-2-4	76	77

Date 13 June Ship IT 2186 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time 0623 Position: Lat. 23 54 N, Long. 167-23 W

Sunset: Time 1946 Position: Lat. 23-07 N, Long. 164-49 W

Miles travelled from 0000 hours to sunrise = 80

Miles travelled from sunrise to sunset = 160

Miles travelled from sunset to 2400 hours = 48

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0547	CELESTIAL	23-57 N	167-41 W
2.	1200	RADAR	23 36 N	166-20 W
3.	2000	LORAN	23 06 N	164 46 W
4.				
5.				

Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt.

0100							
0200	24-22 N	168-28 W					
0300							
0400	24-19 N	168-07 W					
0500							
0600	23-55 N	167-30 W	090 11	5	090 2-4	76	77
0700	6	30					
0800	23-57 N	167-23 W					
0900	49	05					
1000	23-42 N	166-47 W					
1100	39	34					
1200	23-36 N	166-30 W	085 10	3	090 2-4	82	77
1300	32	08					
1400	23-28 N	165-55 W					
1500							
1600	23-18 N	165-26 W					
1700							
1800	23-19 N	165-10 W	085 8	3	090 2-4	80	77
1900							
2000	23-06 N	164-46 W					
2100							
2200	22-58 N	164-20 W					
2300							
2400	22-51 N	163-56 W	060 10	4	050 2-4	76	77

Date 15 JUNE Ship LT 2086 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time 0549 Position: Lat. 21-10 N, Long. 158-07

Sunset: Time _____ Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = 54

Miles travelled from sunrise to sunset = _____

Miles travelled from sunset to 2400 hours = _____

TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
-------------	-------------	----------	-----------

1.

2.

3.

4.

5.

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
------	----------	-----------	-----------	----------	-----------	-----------

0100						
0200	21-20 N	158-36 W				
0300						
0400	21-13 N	158-18 W				
0500						
0600	21-12 N	158-05 W				
0700						
0800	PEARL	HARBOR				
0900						
1000						
1100						
1200						
1300						
1400						
1500						
1600						
1700						
1800						
1900						
2000						
2100						
2200						
2300						
2400						

2086
23 May

53
15
68

Sooty tern

58

16

74

WT Shear.

72

16

88

RFB

3 ~~2~~

3

C. Noddy

8

6

14

Pom Jaeger.

4

2

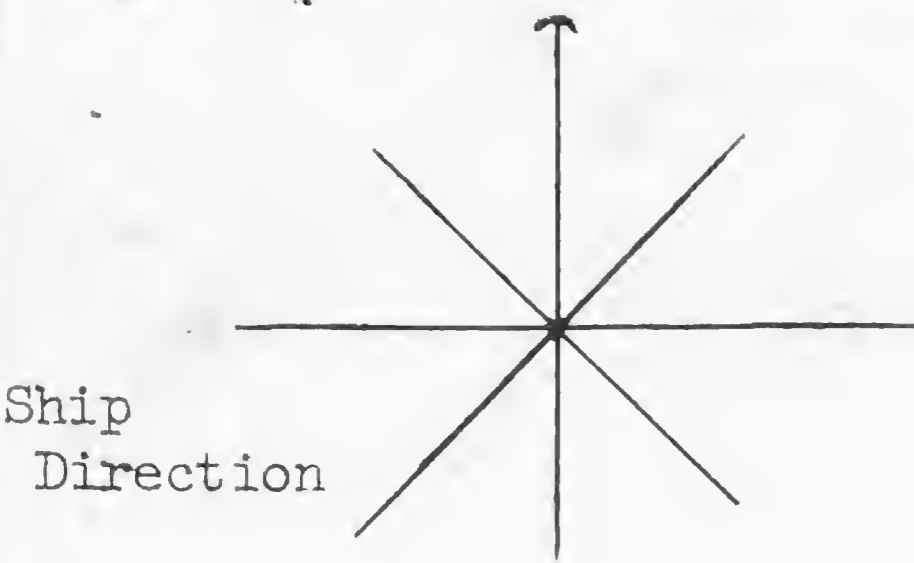
6

Bulwer

1

1
186

6.00



Ship
Direction

LT 2086

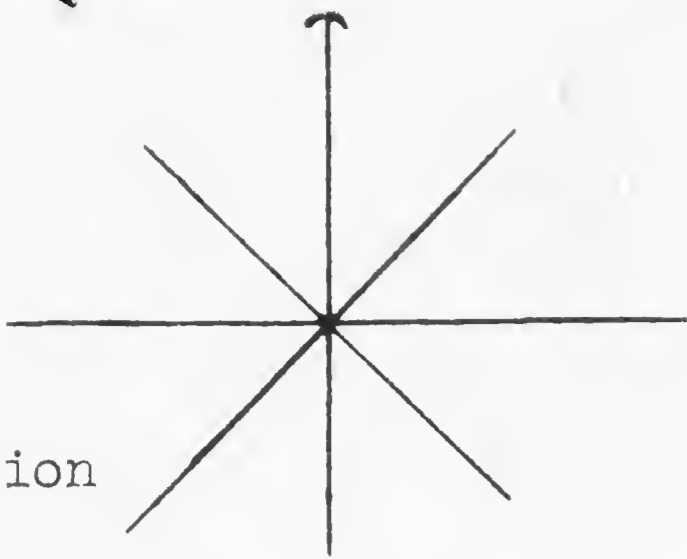
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:
B. DeLong
D. Burkhalter

Date 23 May 1967
Pg. # 1

SPECIMEN
or

	TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
	1430					open obs. - start beyond pearl break water
TF	1435	Sooty Tern	20 ⁺ ✓	E		
TF	1445	"	20✓	E		
	1447	Shearwater?	1✓	⊙		
	1454	Wedge T	1✓	⊙		
	1456	WTS	1✓	⊙		dark
	1457	Sooty	2✓	E		
	1458	"	5✓	E		
	1459	WTS	1✓	⊙		light phase
	1500	Sooty	2✓	E		
	1501	Red F. Booby	1✓	E		ad
F	1503	WTS	15✓	E		
		RFB	1✓	E		ad.
	1504	C. Noddy	2✓	E		
	1505	Pom. J.	1✓	⊙		
	1506	WTS	4✓	⊙		
	1507	WTS	1✓	⊙		Light
	1510	ST	2✓	E		
	1512	RFB	1✓	E		light - ad
	1513	WTS	1✓	E		"
	1514	CN	1✓	E		
	1515	WTS	3✓	⊙		light
	1520	WTS	1✓	⊙		"
	1524	WTS	2✓	⊙		light
	1525	ST	1✓	E		
	1527	WTS	2✓	⊙		light
	1529	Pom. J.	1✓	E		
	1530	WTS	1✓	⊙		light
	1532	"	1✓	⊙		lt.
	1537	"	1✓	⊙		"
	1539	CN	3✓	E		
F	1540	Pom. J.	2✓	E		
		ST	5✓	E		
F	1541	WTS	30 ⁺ ✓	⊙		distant
	1542	CN	1✓	E		
	1543	WTS	1✓	E		lt.
	1545	WTS	1✓	⊙		"
	1546	CN	1✓	E		
	1550	WTS	1✓	⊙		lt.
	1551	ST	1✓	E		
	1558	WTS	1✓	⊙		lt.
	1600	WTS	2✓	⊙		4



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

B. DeLong

D. Borckhaug

Date 23 May 1967
Pg. # 2

SPECIMEN
or

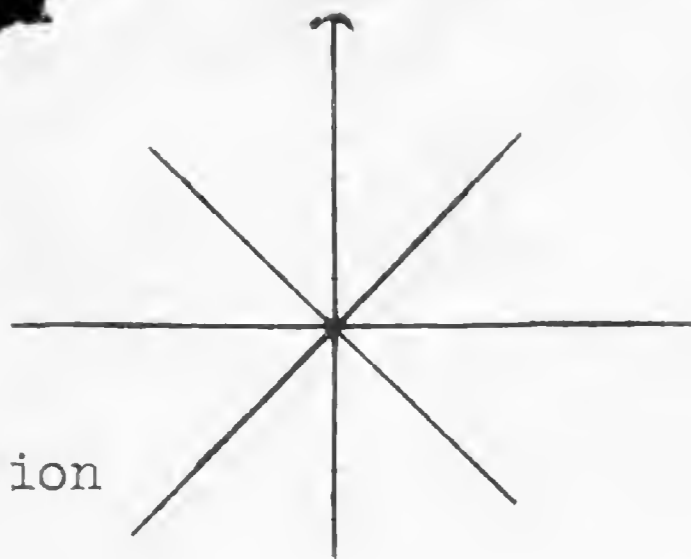
TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1615	Pom J	1 ✓	E		molt flight feathers
1620	WTS	1-	⊙		lt.
1621	WTS	2-	⊙		dk, lt.
1630	ST	1 ✓	⊙		
1631	Pom J	1 ✓	⊙		on H ₂ O - some molt on remiges
1635	CN	1 ✓	E		
1637	WTS	1-	⊙		lt.
1641	WTS	1-	"		lt.
1645	ST ✓	15 ⁺			
1645	WTS	10			
	CN	5 ✓			
1657	WTS	1-	⊙		lt.
1700	Bulwers Petrel	1	818		
1909	Close up				S.S.

BFA		2		2		4✓
Large Pterodroma	1					1✓
Bulwer's Pet	11	9	3	12	14	49✓
						3✓
Grey-b Tern	3					
W-t Shearwater	47	215	12	25	39	338✓
						1✓
Jaeger	1					
						43✓
Sooty Tern	# 13	27	1	2		
						46✓
White Tern	11	4	21	3	7	
						8✓
RF Booby	1	5	2			
BFA						
Brown Noddy		2	3	2		7✓
						7✓
Great Frigate		2	3	2		
Shear Pet		2	260	101		363✓
CI Shear						1✓
W.R.S.P.	88	267	306		1	1✓
					2	
Storm Pet						2✓
					63	
						874

2086

24 May

Ship
Direction



LT 2086

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

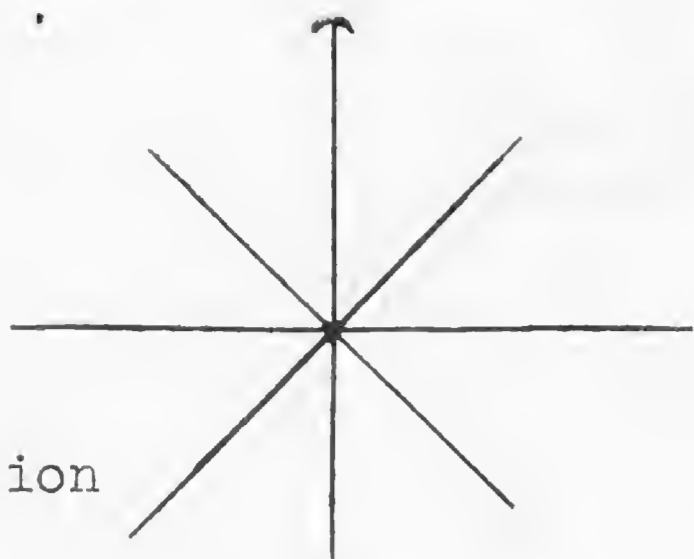
OBSERVERS:

Date 24 May 1967
Pg. # 1

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0740					Begin obs.
0745	Long Pterod	1 ✓	N		
0750	Petrel	1 ✓			rather Sooty & brownish as Bulwer's.
0805	Y.B. Tern	2 ✓	W		
0810	GBT	1 ✓	W		
0812	Bulwer's Sooty	1 ✓	W		
0817	WTS	15 ✓	W		10k, rest lit.
0820	Sooty S.P.	1	W		
0825	WTS	5 ✓	W		
0826	Fairy Tern	4 ✓	W		lt.
0830	WTS	3 ✓	W		
0832	Sooty S.P.	1 ✓	W		
0837	WTS Bul	1 ✓	W		lt.
0838	Sooty S.P.	1 ✓	W		
0843	WTS	1 ✓	W		lt.
0845	WTS	1 ✓	W		lt.
0850	Jaeger	1 ✓	W		
0855	Sooty Tern	2 ✓	W		
0900	WTS	11 ✓	W		lt.
0905	Sooty S.P.	1 ✓	W		lt.
0906	WTS	1 ✓	W		
0911	Bul/SBP	1 ✓	W		
0915	WTS	1 ✓	W		
0923	Sooty S.P.	1	W		
0925	WTS	1 ✓	W		lt.
0926	Fairy T.	1 ✓	W		
0928	WTS	1 ✓			lt.
0935	W	1 ✓			
0939	RFB	1 ✓			lt. P.L. S Ad.
0940	Bul.	2 ✓	W		
0945	Sooty S.P.	1 ✓	W		lt.
	WTS	6 ✓			
	F. Tern	6 ✓			
	S. Tern	10 ✓			

Ship
Direction



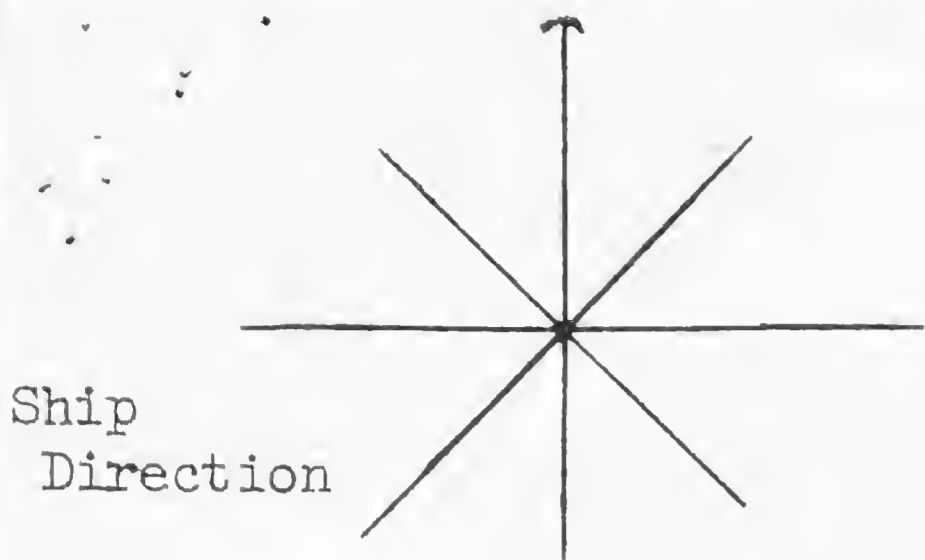
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 24 May 1967
Pg. # 2

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0950	WTS	1 ✓	8		Lt.
0951	Sooty SP Bul	1 ✓	8		
EF 0955	WTS	200 ±	8		
	ST	25 ±			
0958	RFB	2 ✓	on #20		S. Ad.
0959	Pl. shear/pet	1 ✓	2		
1000	WTS	1 ✓	8		Lt.
1005	Sooty SP Bul	1 ✓	8		
1006	WTS	1 ✓	8		Lt.
1008	SSP Bul	1 ✓	8		
1015	F. Tern	1 ✓	8		
1016	SSP Bul	1 ✓	8		
1020	SSP Bul	2 ✓	8		
1022	F. Tern	1 ✓	8		
1025	BFA	1 ✓	Follow		
1027	ST	2 ✓	8		
1032	WTS	1 ✓	8		Lt
1033	SSP Bul	1 ✓	8		
1035	F. Tern	1 ✓	8		
1040	WTS	1 ✓	8		
1045	SSP Bul	1 ✓	8		Lt.
EF 1010	Br. Voodoo	2 ✓	8		Feeding
	WTS	3 ✓			Lt
	RFB	3 ✓			2 Ad; 1 imm (Lt Ph.)
	BF	1 ✓			
1125	Striped Bul	1 ✓			Bul were on Sooty Sp.
1128	White-torn	1 ✓	SW		
1130	WTS	1 ✓	8		Lt.
1140	BFA	1 ✓	E		Large all black - fast.
1141	Shear/pet	1 ✓	E		
1150	WTS	6 ✓	E		5 Lt, 1 DK.
1155	Shear/pet	1 ✓			



Ship
Direction

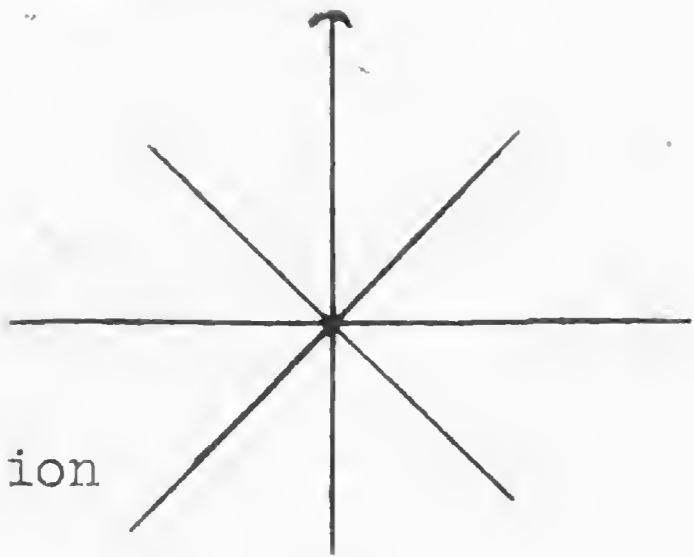
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 24 May 1967
Pg.# 30

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1200	WTS	3 ✓	80		LT.
1203	F. Tern	1 ✓	80		
1205	"	1 ✓	80		
1208	"	2 ✓	80		
1218	BR	2 ✓	80		
1220	Br Noddy	2 ✓			
1225	WTS	2 ✓	NE		chased by frigate
FF 1232	Shear/pets ca. 250	50			LT.
	F. Tern	5 ✓			
	Sooty T.				
1235	F. Tern	3 ✓	80		
1240	"	1 ✓	80		
1243	"	1 ✓	80		
1250	Sooty T.	1 ✓	80		
1251	WTS	1 ✓	80		LT.
1258	F. Tern	1 ✓	80		
1258	S-SP Bul	1 ✓	80		
1259	F. Tern	1 ✓	80		
1300	WTS	1 ✓			LT.
1301	F. Tern	2 ✓	80		
1303	S-SP Bul	1 ✓	80		
FR 1317	G. Frigate	1 ✓			
	RFB	2 ✓			
	Shear/pets	10 ✓			
1320	F. Tern	1 ✓	80		
1322	"	1 ✓	80		
1323	C. Noddy	1 ✓	80		
1325	F. Tern	1 ✓	80		
1340	WTS	1 ✓	80		LT.
1350	S-SP Bul	1 ✓	80		Sooty or bulwer
1351	W. Tern	1 ✓	80		can close
1410	WT Shear	1 ✓	80		SP K.
1425	CI Shear	1 ✓	80		
1431	WT Shear	1 ✓	80		LT.
1445	"	2 ✓			"



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

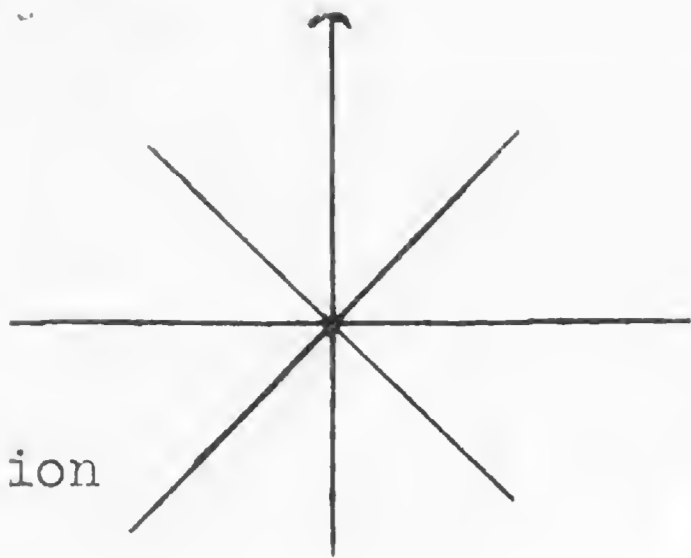
OBSERVERS:

Date 24 May 1967
Pg.# 4

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1505	S. Tern	1 ✓	N		
1509	WTS	1 ✓	⊙		Lt.
1510	SSP Bul	2 ✓	⊙		
1520	WTS	1 ✓	⊙		Lt.
1530	WTS	1 ✓	⊙		Lt.
1544	BFA	1 ✓	⊙		
1546	WTS	3 ✓	⊙		Lt.
1548	"	2 ✓	⊙		Lt.
1549	"	1 ✓	⊙		"
1554	"	2 ✓	⊙		Lt.
FF 1555	G. Frigate	1 ✓			
	Birds - shear/pets 100	50			prob. wedgies
1559	Shear/pet	1 ✓	⊙		
1604	WTS	1 ✓	⊙		Lt.
1606	BFA	1 ✓	⊙		
1612	WTS	1 ✓	⊙		Lt.
1620	C. Noddy	1 ✓	⊙		
1624	WTS	2 ✓	⊙		Lt.
1625	SSP Bul	1 ✓	⊙		
1626	" Bul	2 ✓	⊙		
1628	"	1 ✓	⊙		
1630	WTS	1 ✓	⊙		Lt.
1634	SSP Bul	1 ✓	⊙		
1640	" Bul	2 ✓	⊙		
1642	WTS	1 ✓	⊙		Lt.
1644	SSP Bul	1 ✓	⊙		Lt.
1645	WTS	1 ✓	⊙		Lt.
1647	WTS	1 ✓	⊙		Lt.
1648	SSP Bul	1 ✓	⊙		
1649	F. Tern	1 ✓	⊙		
1650	"	1 ✓	⊙		
1651	WTS	2 ✓	⊙		Lt.
1654	WTS	1 ✓	⊙		
1655	WTS	1 ✓	⊙		Lt.
1657	"	1 ✓			Lt.
1658	"	1 ✓			Lt.
1710	Sooty tern	1 ✓	E		
1714	Fairy tern	1 ✓	W		
1716	WTS	1 ✓	⊙		Lt.

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 24 May 1967
Pg. # 5

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1817	SSP Bul	1 ✓	3		
1823	WRSP	1 ✓	3		
FF 1829	F. Tern	1 ✓			
	SSP Bul	10 ± ✓			
7	WTS	30 ± ✓			no. Dk. phase noticed
1830	SSP Bul	1 ✓	3		
1832	WTS	1 ✓			LT
1842	St. Pet	1 ✓	3		
1847	W-T Sh.	1 ✓			Sooty as bulweri.
1805	Wt Sh.	1 ✓	3		
1820	Wt Sh.	1 ✓	888		LT
1825	WTS	2 ✓	888		LT
1830	Sooty S. Pet.	1 ✓	888		LT
1835	WTS	1 ✓	3		LT
1838	W. Tern	6 ✓	888		
1850	Storm Pet.	1 ✓			small (Larcker's - sized bird) all black.
1853	LT Sh.	1 ✓	888		LT
1854	"	1 ✓	888		LT
1857	Storm Pet.	1 ✓			Sooty as bulweri

25 May

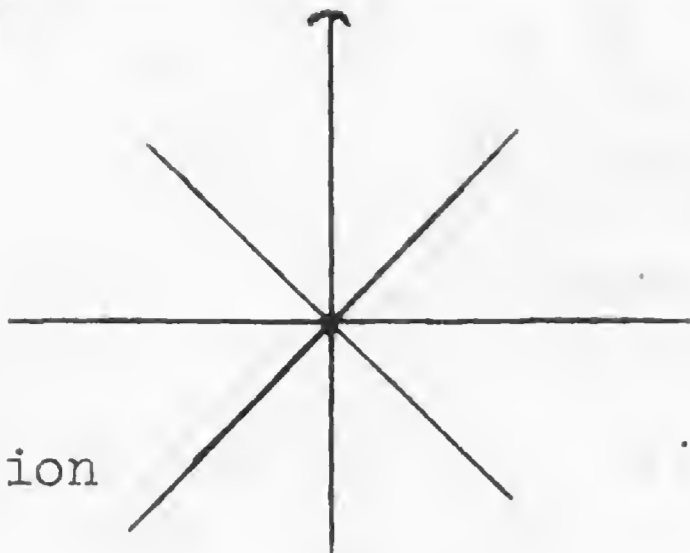
Long Salt	1 + 1	2	✓	-1
BFA	12 + 4	16	✓	
W. Blue	20 + 17 + 28	65	✓	
Storm Pet	1	1	✓	
Slender Pet	3	3	✓	
Baldpate	3 + 6	9	✓	(-1)
Sooty Tern	9 + 18 + 83	110	✓	
Crown Noddy	10	10	✓	
Fairy Tern	1 + 2 + 1	4	✓	
H. Frigate	2 + 1	3	✓	(0)
RFB	-1	1	✓	
<u>Terns</u>	<u>50 +</u>	<u>50</u>		
PIFL	-1	1	✓	
Tern sp.	50	50	✓	
Noddy sp.	1	1	✓	
Booby	1	1	✓	
		<u>327</u>		

2086
25 May 1967

LT 2086

OBSERVERS:

Ship
Direction



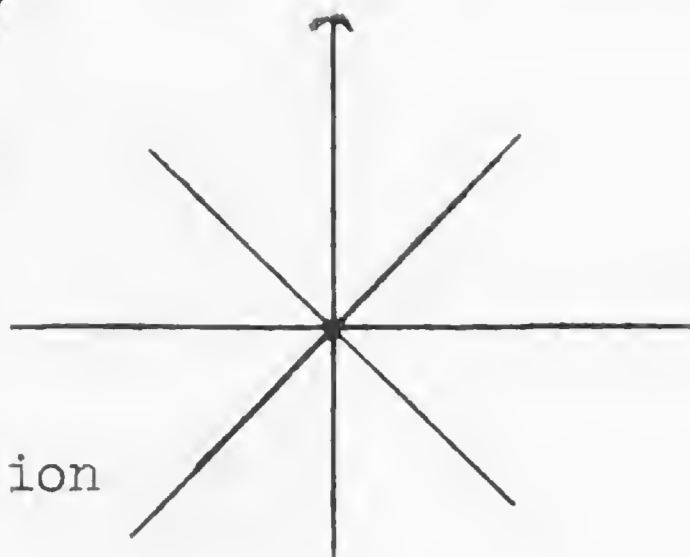
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN
or

Date 25 May 1967
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0630					begin obs
0631	BFA	3 ✓	⊙		
0635	WTS	1 ✓	⊙		Lt.
0636	Sooty Tern	1 ✓	⊙		
0637	C. Noddy	1 ✓	⊙		
0640	F. Tern	1 ✓	⊙		
0646	ST	2 ✓	E		
0649	SP	1 ✓	E		
0650	Shear/pet	1 ✓	⊙		
0652	G. Frigate	1 ✓	NE		AF
0654	C. Noddy	3 ✓	NE		
0656	ST	1 ✓	E		
0702	ST	1 ✓	E		
0704	G. Frigate	1 ✓	E		AF
0715	Sooty tern	1 ✓	SW		
0716	WTS	1 ✓	E		Lt.
0718	Laysan Bulb	1 ✓	SW		
0722	Sooty S. Pet	1 ✓	SW		
0725	Wedge tail	2 ✓	SW		Lt.
0735	Shear/Pet	2 ✓	⊙		
0740	BFA	6 ✓			Follow 87 = 9
0742	WTS	1 ✓	⊙		Lt.
0742	ST	1 ✓	⊙		
0745	WTS	2 ✓	⊙		Lt.
0747	C. Noddy	5 ✓	NE		
0750	Laysan A	1 ✓	⊙		
0752	WTS	2 ✓	⊙		Lt.
0755	WTS	3 ✓	⊙		Lt.
0800	WTS	2 ✓	⊙		Lt.
0805	SSP. Bul	1 ✓	⊙		
0806	WTS	1 ✓	⊙		Lt.
0807	C. Nod.	1 ✓	⊙		
0808	WTS	2 ✓	⊙		Lt.
0809	ST	1 ✓	⊙		
0810	BFA	3 ✓			now 16
0813	SSP. Bul	1 ✓	⊙		
0814	WTS	2 ✓	⊙		Lt.
0816	WTS	1 ✓	⊙		Lt.
0819	ST	1 ✓	W		

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

B. DeLong

D. Burckhalter

Date 25 May 1967
Pg.# 2

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0824 WTS 3 ✓ Lt.

0826 WTS 2 ✓ Lt.

0829 WTS 2 ✓ Lt.

0830 ST 3 ✓

0835 Laysan A. 1 ✓ now 2

0837 ~~ssp Bul~~ 1 ✓

0842 G. Frigate 1 ✓ Ad

0845 close obs ~~1/2~~ miles from French Frigate Shoals

0900 Pacific B-n ~~Delphinoidae~~ ca. 50 w/young round wakes of bow for 5 min.

1640 resume obs. 7 1/2 off F.F.S.

1645 BFA 4 ✓ following

1647 F. Tern 1 ✓ Lt.

1648 WTS 1 ✓

1651 Bul 1 ✓

1654 C. Nod 1 ✓

1655 Bul 1 ✓

1656 WTS 1 ✓ Lt.

1700 F. Tern 1 ✓

1701 ST 2 ✓ E

1704 WTS 1 ✓ Lt.

1705 ST 1 ✓ E

1707 WTS 1 ✓ Lt.

1711 WTS 1 ✓ Lt.

1713 ST 1 ✓ S

1718 ST 1 ✓ S

1719 Bul 1 ✓

1722 WTS 1 ✓ Lt.

1724 Bul 1 ✓

1840 Sooty T 3 ✓ N

1845 Wedge T 1 ✓ N LP

1848 Sooty T 1 ✓ N

1800 Wedge T 1 ✓ SE

1803 Sooty T 4 ✓ E Adelt

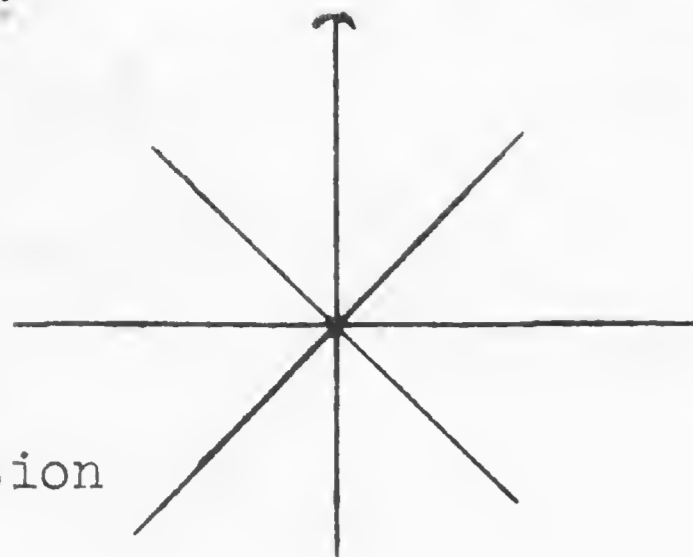
1804 " 3 ✓ NE "

1810 Bulwers 1 ✓ 000

1824 RFB. 1 ✓ Lt; Ad

1835 WTS 2 ✓ Lt

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

R. DeLong
D. Burkhalter
D. Stahl.

Date 25 May '67
Pg.# 3

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

	1850	Sooty tern	2 ✓	E		Ad.
	1853	"	4 ✓	E		"
	1855	"	1 ✓	E		"
	1858	Lt SL	2 ✓	SEA		
	1903	"	1 ✓	SEA		Lt PL
	1910	CF Shear	1 ✓	SEA		
F	1911	Terns	50+			5 mile ahead.
	1920	Noddy sp	1 ✓	N		
	1921	Sooty tern	1 ✓	S		
FF	1928	Sooty tern	75 ± 10			Lt.
		Lt SL	25 ± 4			
		b. booby sp	1 ✓			
	1931	L. tern	1 ✓			

26 May

BFA - 1 - 3

4 ✓

83

75

2

WTSB - 11 - 64 - 176 - 49

300 ✓

112

N-B Term 6 - 1

7 ✓

Sooty Tern 28 - 162 - 308 - 22

521 ✓

Fairy Tern 4 - 2 - 3

9 ✓

Turn - 2

2 ✓

BFB - 15

15 ✓

MF - 4 - 4

8 ✓

B. Bunting - 1

1 ✓

RTTB - 1

1 ✓

B. B. Noddy 4

4 ✓

B. B. Noddy 2 - 26 - 1

29 ✓

B. B. Noddy 2 - 1 - 1

4 ✓

J. Wren - 1

1 ✓

906

2086 26 May

LT 2086

OBSERVERS:

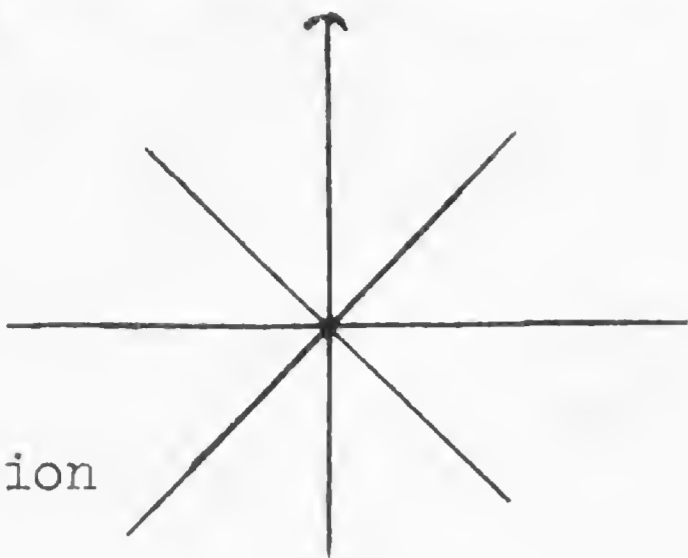
R. DeLong

D. Burchhalter

P. Stadel

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

Ship
Direction

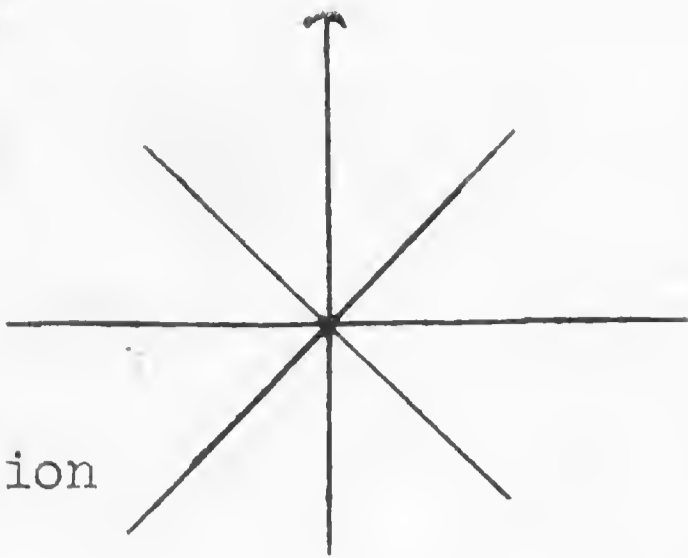


SPECIMEN
or

Date 26 May 1967
Pg.# 1

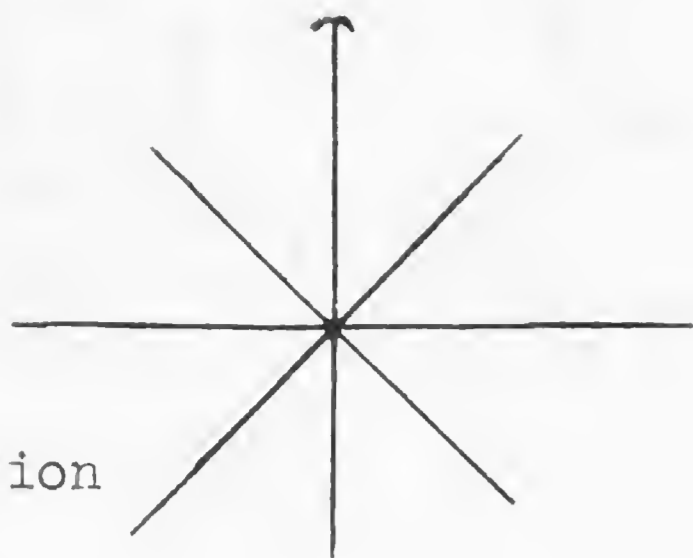
TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0620					Begin Watch
0623	Wedgetail	1	NE		
0628	"	1	NE		"
0632	"	1	NE		"
0640	"	1	"		LP
0645	"	1	"		"
0648	"	1	"		"
0659	Tern	1	E		Probably Sooty
0702	Grey-b Tern	1	E		
0708	BFB	2	E		Adult
0715	Tern	1	W		
0725	W-B Tern	2	N		
0726	W-Frig.	2	SW		Ad.
0728	WTS	1			Lt.
0730	ST	2			
0735	WTS	2			
0740	BFB	2			ad
0741	ST	1			
0742	BFB	4			3rd, 1 SA
0742	BB	1			
0743	G-Frigate	2			
0745	BBB	1			ad
0746	Sooty T.	25+			
0747	GB-Tern	1			
0748	RTTB	1			
0749	Bl-gray Nod	1			
0750	G-B Tern	1			
0753	BFB	2			
0754	RTTB	1			
0755	BFB	4			
0756	F-Tern	4			
0757	Bl-gray N.	3			
0758	G-B Tern	1			imm.
0800					close obs. 1 1/2 mi off Gardner's Pinnacles
1200					reopen obs. - underway
1200	BFA	1	Follow.		
1218	WTS	1			Lt.
1220	C. Nod.	2			
1220	WTS	1			Lt.

OBSERVERS:

Ship
DirectionSMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - ESPECIMEN
orDate 26 May 1967
Pg.# 2

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1258	G-B Tern	1 ✓	88		
1310	C Noddy	1 ✓	N		
1322	Wedgetail	1 ✓	N		LP
1337	Wedge tail	1 ✓	88		Lt.
1350	"	2 ✓	88		LT
1350	Wedge tail	1 ✓	88		Lt.
1400	⁴¹¹ Frigate	2 ✓	888		Circling high - wing jerk.
1408	Wedgetail	1 ✓	888		LT
1450	"	1 ✓	888		Lt
FF 1454	Wedgetail	35 ± 5			
	Sooty tern	80 ± 10			
1500	C. Noddy	10 ± 4		now 2	
1508	Lt shear	2 ✓			
1510	C. Noddies	15 ± 4			
1509	Sooty tern	2 ✓			
1512	Wedgetail	1 ✓	W		
1518	"	2 ✓	888		
1519	Sooty tern	1 ✓	888		
FF 1520	Sooty tern	75 ± 20			
	Fairy tern	2 ✓			
	Wedgetail	15 ± 3			
1528	⁴¹¹ Frigate	2 ✓	888		
1530	Bulwer's	1 ✓	888		
1535	Sooty tern	2 ✓	W		Lt.
1552	WTS	1 ✓	88		
1554	WTS	1 ✓	88		Lt
1600	Bulwer's	1 ✓			
FF 1617	Sooty T	150	E		Adults
	Wedgetail	70			LP

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

D.L. Stadel

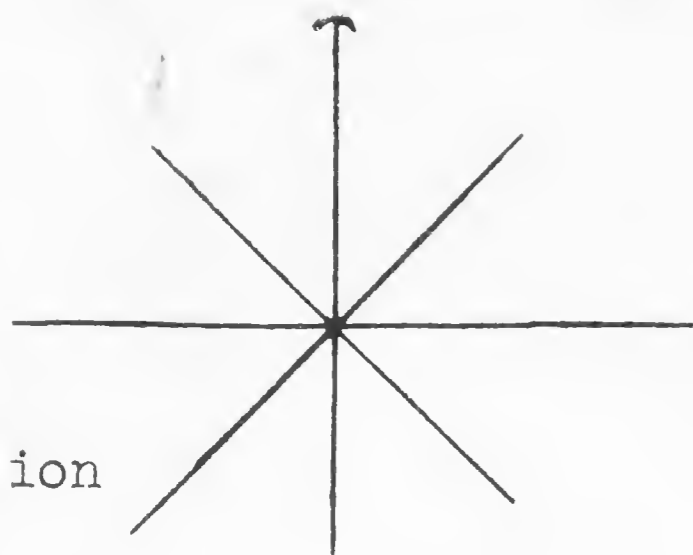
Date 26 May
Pg.# 3

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

TF	1620	Sooty T Wedgetail	230 ✓ 110 ✓			Large flock in two groups. Terns we seen diving to water & WT lit on water but no feeding was observed. Appeared to be a broken up feeding flock.
	1630	Wedgetail	1 ✓	N		
	1635	C. Noddy	1 ✓	⊙		
	1640	WTS	1 ✓	⊙	—	Lt.
	1645	ST	1 ✓	⊙		
	1646	Wedgetail	2 ✓	E		LP
TF	1647		7 ✓	E		
	1650	WTS	1 ✓	⊙	—	Lt.
	1655	"	1 ✓	⊙	—	Lt.
	1658	"	1 ✓	⊙		
	1659	"	4 ✓	⊙	—	Lt.
	1710	Jaeger	1 ✓	⊙		On Sub Adult, Int phase
FF	1720	Sooty T Wedgetail	70 ± 40 ±	⊙		Adults. WT all Light Phase. No large fish breaking surface
	1735	Fairy T WTS	1 ✓	⊙	—	Lt.
	1736	ST	4 ✓	E		
	1737	WTS	1 ✓	⊙	—	Lt.
	1750	BFA			—	now 5
	1755	WTS	1 ✓	⊙	—	Lt.
	1759	WTS	4 ✓	⊙	—	Lt.
	1800	ST	1 ✓	⊙		
	1805	WTS	1 ✓	⊙	—	Lt.
	1810	Sooty tern	2 ✓	E	—	Ad.
	1820	Bulwer's P.	1 ✓	N		
	1826	BFA	3 ✓			Total of 4 following also as there have been for most of day.

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

DeLong
Frank H. B.
Stadel

Date 26 May '67
Pg. # 4

SPECIMEN
or

	TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
FF	1830	W. t. Shear.	1 ✓	SE		Lt. Phase.
	1835	"	2 ✓	SE		"
	1843	Sooty tern	20 ± 5 ✓			Ad.
		Wedgetails	30 ± 5 ✓			Lt
		Fairy tern	3 ✓			
	1855	W. t. Sh.	2 ✓	SE		Lt
	1858	"	1 ✓	N		Lt
	1900	Sooty tern	1 ✓	N		Ad.
	1901	W. t. Shear	3 ✓	S		Lt Ph.
	1915	Sooty T	1 ✓	N		
	1935	Sooty T	1 ✓	N		
	"	Wedgetail	1 ✓	N		LP
	1940	Bulwers	1 ✓	N		
	1946	Wedgetail	1 ✓	N		LP
	"	"	1 ✓	W		"
	1953	"	1 ✓	N		"
	"	"	1 ✓	S		"
	2000	"	1 ✓	W		"
	"	"	1 ✓	W		"
	2001	"	1 ✓	W		"
	2003	"	1 ✓	W		"
	2005	"	1 ✓	W		"

29 May

BFA - 5 - 4 - 1

10 ✓

Lay A - 1 - 2 - 3

6 ✓

W+Slur - 21 - 52 - 27 - 166 - 22

298 ✓

Stem sp. - 3

3 ✓

BEP - 3 - 5 - 13 - 13 - 4

38 ✓

Forty of 2 - 61 - 1

64 ✓

BFB - 1 - 1

2 ✓

BFB - 1 - 2 - 2 - 3

8 ✓

ABT - - 2

2 ✓

Fucylen - - - 2

2 ✓

Bs Noddy 15

15 ✓

Mr. Fuy - 2

2 ✓

Small Pterodroma 1

1 ✓

5 Lays / sub 6

6 ✓

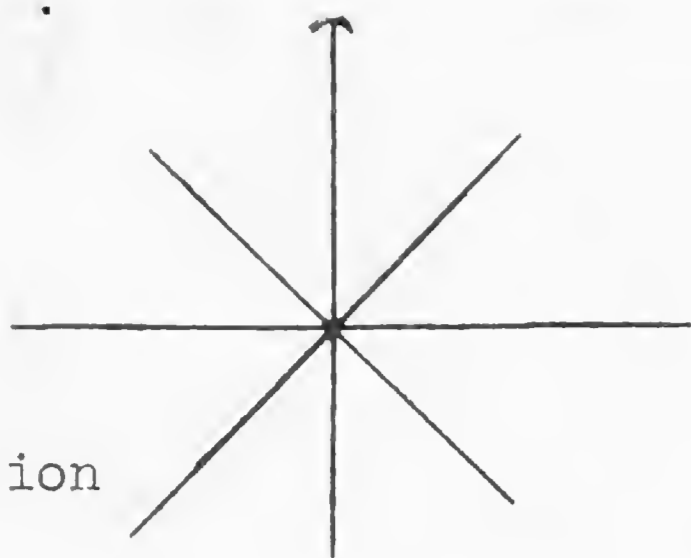
RTTB - 1

1

458

2086

Ship
Direction



LT 2086

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS: DeLong, Stadel
Barkhalter

Date 27 May '67
Pg. # 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0630 --- begin obs.

0630 WtSLan 1 ✓ SW LT Ph.

0637 " 1 ✓ SW "

0640

0642 WtSLan 1 ✓ Sunrise

0643 Long San Alb. 1 ✓ SW Lt.

0644 B.F. Albat. 2 ✓ Still flying about ship

0650

Today The 2087 is 4 miles to
our starboard and the 2081 has been
dropped one mile off the aft port
quarter. This is reducing possible
affect on birds seen.

0702 BFA 3 ✓ Still 5 flying about ship.

0704 WtSL. 1 ✓ SW Lt.

0708 Storma sp. 3 ✓ N

0710 WtSL. 4 ✓ NE Lt.

0711 " 4 ✓ "

0712 " 4 ✓ "

0713 " 4 ✓ "

0714 Bonin Is 1 ✓ N

" " 1 ✓ N

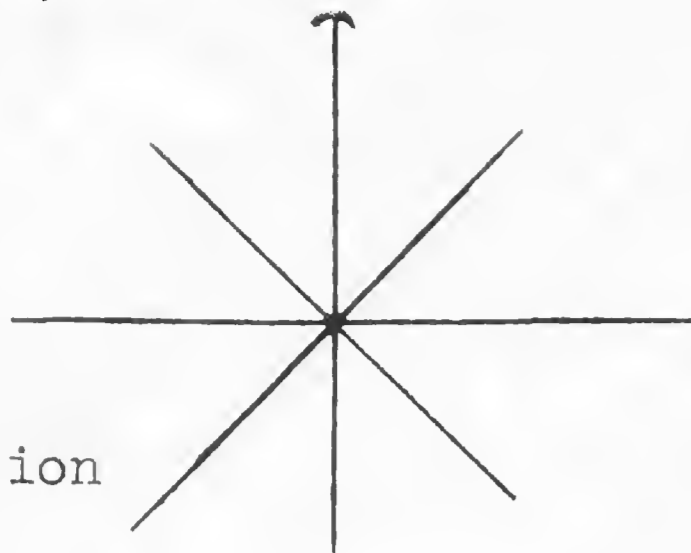
0716 Laysan A 1 ✓ All

0718 Bonin 1 ✓ N

" Wedgetail 1 ✓ N

0719 Sooty 2 ✓ N

285

Ship
Direction
 SMITHSONIAN INSTITUTION
 DIVISION OF BIRDS
 AT SEA DAILY LOG - E

OBSERVERS:

DL Stadel

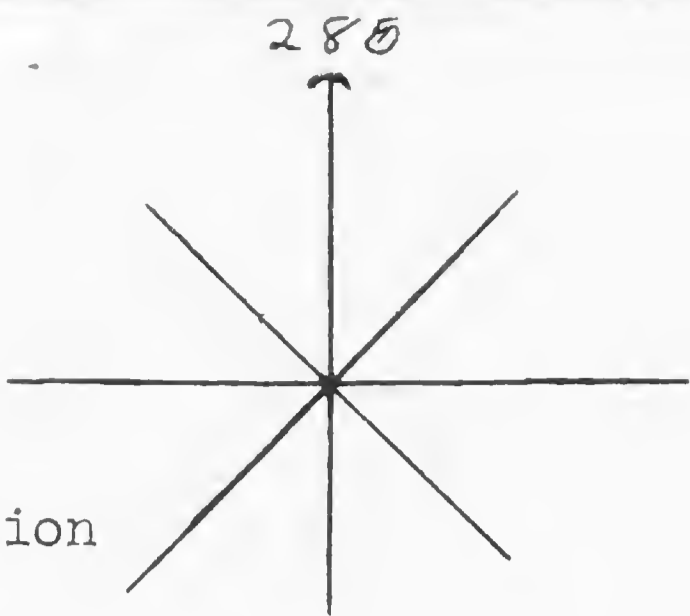
Date 27 May
Pg.# 2

SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

0719	BFB	1✓	N		Adult
0720	Bonin Is	1✓	N		
"	Wedgetail	3✓	N		LP
0728	"	4✓	N		
0729	Laysan A	2✓	el		
0733	Wedgetail	3✓	N		
0725	"	2✓	N		
0728	"	2✓	N		
"	"	3✓	N		
0730	Bonin	1✓	⊙		
0732	Wedgetail	3✓	N		LP
0735	"	2✓	N		"
0737	Laysan	2	N		
"	Wedgetail	4✓	N		LP
0739	"	4✓	N		
0741	Bonin	1✓	N		
0743	Wedgetail	4✓	N		
44	"	2✓	N		
0747	"	2✓	N		
48	Bonin	1✓	N		
0749	Wedgetail	2✓	N		
0752	"	2✓	N		
"	Bonin	1✓	N		
0757	Wedgetail	3✓	N		
158	Bulwers	1	N		
1159	Wedgetail	3✓			
0808	"	4✓	N		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

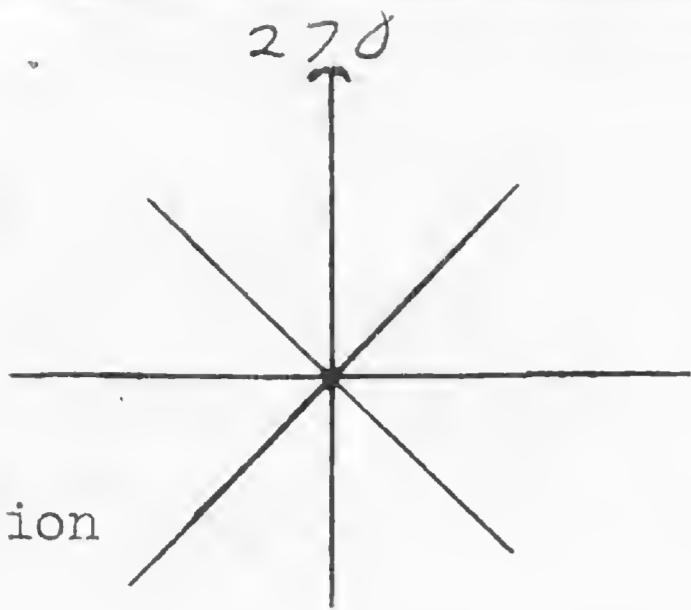
DL Stadel
D Burkhalter

Date 27 May
Pg.# 3

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0808	Wedgetail	3 ✓	N		
0812	"	3 ✓	N		
0813	Bonin	1 ✓	S		
0814	Wedgetail	2 ✓	N		
0815	"	3 ✓	N		
0816	BFA	3	W		
0825	Bonin	1 ✓	W		
0828	"	1 ✓	W		
0833	WTS	1 ✓	W		Lt.
0835	Bul.	1 ✓	W		now 3
0836	Laysan	1 ✓	W		
0841	BIP	1 ✓	W		
0842	WTS	1 ✓	W		Lt.
0843	GB Tern	2 ✓	W		ad.
0846	WTS	1 ✓	W		Lt.
0850	BFA	4 ✓	W		now 9
0854	Bul	1 ✓	W		
0859	WTS	2 ✓	W		Lt.
0901	BIP	1 ✓	W		
0903	WTS	1 ✓	W		Lt.
0905	BIP	1 ✓	W		
0906	WTS	1 ✓	W		Lt.
0908	WTS	1 ✓	W		Lt.
0910	WTS	1 ✓	W		Lt.
0913	BIP	1 ✓	W		
0914	BIP	1 ✓	W		
0922	BIP	1 ✓	W		
0935	WTS	1 ✓	W		Lt.
0942	WTS	1 ✓	W		Lt.
0945	BFB	1 ✓	E		ad.
0948	WTS	1 ✓	W		Lt.
0952	WTS	1 ✓	W		Lt.
0954	"	1 ✓	S		Lt.
0957	"	1 ✓	S		"
1009	Bonin	1 ✓	N		
1012	"	1 ✓	S		
1013	"	1 ✓	S		
1014	Wedgetail	1 ✓	S		
1018	Bonin Is	1 ✓	N		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

DL Stadel

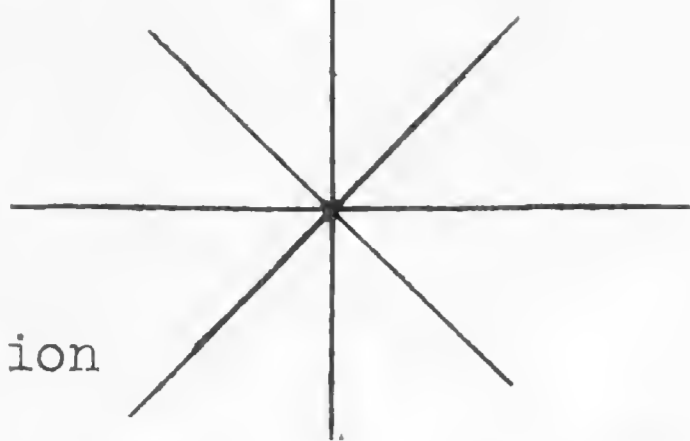
R. Rehorny

Date 27 May 67
Pg. # 4

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1002	Bonin	2 ✓	05		
1023	"	1 ✓	N		
104	Wedgetail	2 ✓	00		lt
105	"	1 ✓	N		"
1100	Leysan Albatross	1 ✓	N		not following
1104	B.F. P.	1	S		"
1113	W-T Shear	1 ✓	S		LT
1117	Sooty tern	3 ✓	SW		
1128	Bonin Isl.	2 ✓	S		
1135	Bulwer's Pet	1 ✓	SW		
FK 1140	W-T Shear	150 ± 20			
	Sooty tern	50 ± 10			
	B-F Pet	5 ✓			
	Fairy tern	2 ✓			
	C. Noddy	15 ✓			
	Mr. Frig	2 ✓			Ad. ♂
	Leysan alb.	2 ✓			
	B-F Alb.	1 ✓			
1155	WTS	1 ✓	0		LT.
1158	BIP	1 ✓	0		
1203	BIP	1 ✓	0		
1205	WTS	1 ✓	0		LT.
1210	Bul	1 ✓	0		
1212	ST	3 ✓	0		ads.
1217	ST	2 ✓	0		ads.
1219	ST	1 ✓	N		ads.
1220	ST	2 ✓	0		ads.
1230	WTS	1 ✓	0		LT.
1233	WTS	2 ✓	0		LT.
1237	WTS	2 ✓	0		LT.
1239	WTS	1 ✓	0		LT.
1250	WTS	3 ✓	0		LT.
1255	WTS	1 ✓	0		LT.
1300	B-F Pet	1 ✓	SW		pink behind eye?

27.0

Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

DeLong
Burkholder
Stadel

Date 27 May
Pg. # 5

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

1320	Pterodroma small.	1 ✓	S		
1325	shear pet	2 ✓	SE		Bonin or Ledge.
1352	W-t shear.	1 ✓			LT.
1410	B-I Petrel	1 ✓	SE		
1420	Bonin Is	1 ✓	N		
1500	"	1 ✓	S		
1520	WT. Sh	1 ✓	N		LT
1550	"	1 ✓	N		LT
1555	Bul	1 ✓	SE		
1607	WTS	1 ✓	SE		LT.
1608	Bul	1 ✓	SE		
1618	WTS	1 ✓	SE		LT.
1623	WTS	1 ✓	SE		
1624	ST	1 ✓	S		ad.
1630	WTS	1 ✓	SE		LT
1631	Shear/pet	3 ✓	E		
1633	Shear/pet	1 ✓	SE		
1644	Bul.	1 ✓	SE		
1708	RTTB	1 ✓	E		
1716	BIP	1 ✓	SE		
1718	WTS	1 ✓	SE		LT.
1720	WTS	1 ✓	SE		LT.
1723	WTS	1 ✓	SE		LT.
1740	WTS	1 ✓	N		
1744					20 ± BFA following
1752	WTS	1 ✓	SE		
1809	"	2 ✓	SE		
1830	WTS	2 ✓	SE		LT.
1843	"	1 ✓	SE		"
1903	"	1 ✓	SE		"
1915	"	1 ✓	SE		"
1928	"	2 ✓	S		"
1953	"	1 ✓	SE		
2010					Stop

28 May 1962

86

LA - 1

BFA - 3

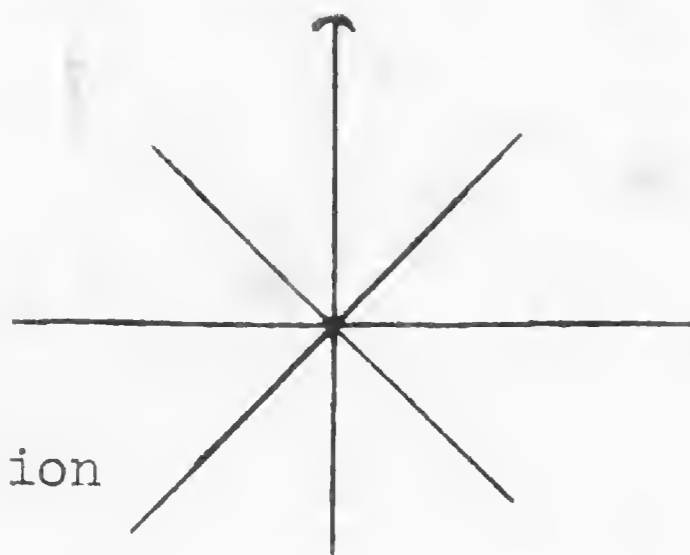
ST 21

WTS 8

RT 11

44

Ship
Direction



LT 2086

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

R. DeLong

D. Burchhalter

P. Stadel

Date 28 May 1967

Pg. # 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

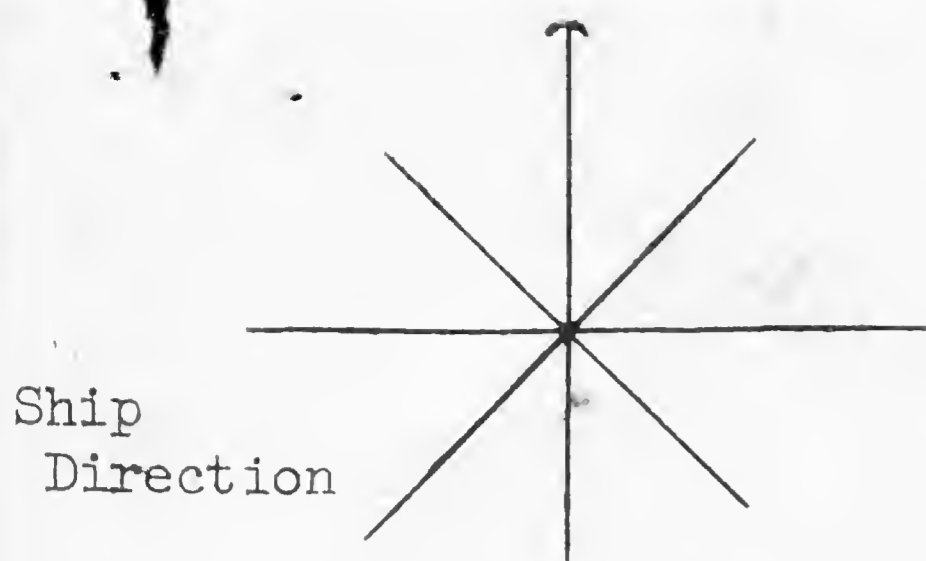
	0645				Begin
	0645	BFA	1 ✓	⊙	
	0652	ST	1 ✓	E	ad.
	0658	ST	1 ✓	E	ad.
	0700	Laysan A	1 ✓	⊙	
	0706	WTS	1 ✓	⊙	Lt.
	0709	WTS	1 ✓	⊙	Lt.
	0710	ST	1 ✓	⊙	ad.
	0712	WTS	1 ✓	⊙	Lt.
	0713	ST	1 ✓	E	ad.
	0716	WTS	1 ✓	⊙	Lt.
TF	0718	Roddy Turnstone	5 ✓	E	ad. ad. ad. ad. ad. } did not appear to be in breed. plum.
	0719	WTS	3 ✓	⊙	Lt.
TF	0720	R. Turnstone	6 ✓	E	ad. ad. ad. ad. ad. ad.
	0721	ST	1 ✓	⊙	ad.
	0724	WTS ST	1 ✓	⊙	ad.
	0725	ST	2 ✓	⊙	ad.
	0730	ST	1 ✓	E	ad.
	0732	ST	2 ✓	⊙	ad.
	0734	ST	4 ✓	⊙	ad.
	0735	WTS	1 ✓	⊙	Lt.
	0737	ST	3 ✓	⊙	ad.
	0738	ST	4 ✓	E	ad.
	0740				cease obs. ca 10 mi from SE Island

birds all over of all
kinds

1292

LA	2		2	(1)	2 ✓
BFA	2	-4	6	(6)	6 ✓
LTS	45	-212	-49	-18	324 + 57 = 381 ✓
BIP	2	-5	7		7 ✓
July 1st	51	-56	-3		110 + 99 = 209 ✓
HBT	6		6	+1	= 7 ✓
Fryton	3	-1	4		4 ✓
Bulwers	1	-1	2		2 ✓
Br Noddy	1		1		1 ✓
HE	2	-1	3	+1	= 4 ✓
June 1st			1		1 ✓
RTTB			466		1 ✓
RFB					3 ✓
Ruddy Turnstone					1 ✓
Hut					2 ✓
					631

Total
daily 86,587



Ship
Direction

LT 2086

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

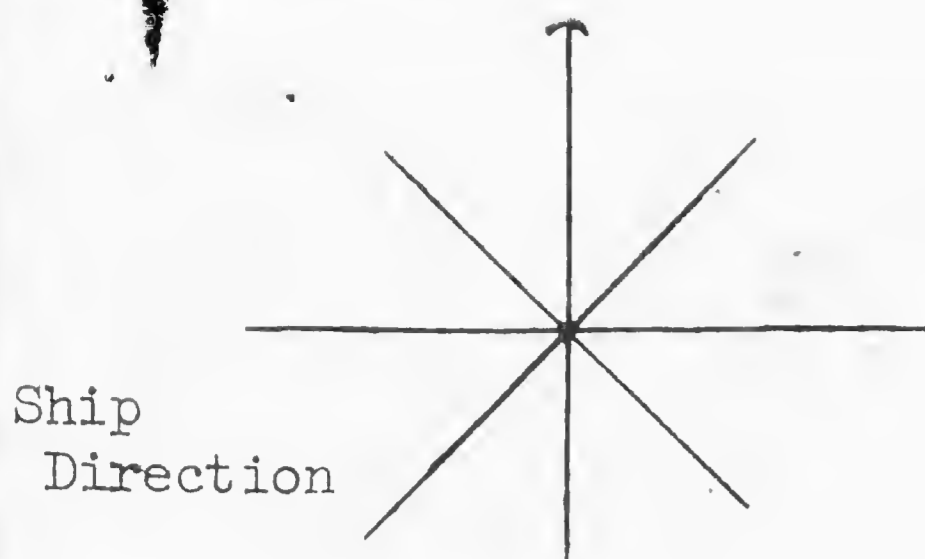
OBSERVERS:

Date 12 June 1967
Pg. # 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

	1245					begin obs.
	1245	WTS	2 ✓	⊙		Lt
	1247	"	3 ✓	⊙		Lt.
	1248	Laysan A.	1 ✓	⊙		
	1249	BFA	2 ✓	⊙		
TF	1250	Sooty T.	8 ✓	W		ad.
	1251	BIP	1 ✓	⊙		
	1300	WTS	2 ✓	⊙		Lt.
	1304	WTS	3 ✓	⊙		Lt.
	1306	"	4 ✓	⊙		Lt
	1308	"	3 ✓	⊙		Lt
	1310	ST	4 ✓	W		ad
	1311	BIP	1 ✓	⊙		
	1315	GB Tern	1 ✓	E		
	1316	WTS	3 ✓	⊙		Lt.
TF	1320	ST	5 ✓	W		ad
	1323	Fairy T.	1 ✓	⊙		
	1325	"	2 ✓	⊙		
	1327	GB Tern	1 ✓	⊙		
	1330	WTS	3 ✓	⊙		Lt.
	1345	WTS	1 ✓	⊙		Lt.
	1352	"	4 ✓	⊙		Lt.
	1405	ST	2 ✓	W		ad.
	1406	Bul.	1 ✓	⊙		
	1407	WTS	1 ✓	⊙		Lt.
	1420	"	3 ✓	⊙		Lt.
	1424	"	2 ✓	⊙		Lt.
	1427	"	3 ✓	⊙		Lt.
	1434	"	3 ✓	⊙		"
	1440	GBT	3 ✓	E		
	1455	WTS	1 ✓	⊙		Lt.
	1504	GBT	1 ✓	⊙		
	1505	WTS	1 ✓	⊙		Lt.
	1511	ST	2 ✓	W		ad.
	1515	WTS	1 ✓	⊙		Lt.
	1517	ST	3 ✓	W		ad.
IF	1522	HF	2 ✓			
		Sooty tern	25 ✓	⊙		Lt
		Wedge tailed shear	2 ✓			
	1525	Sooty tern	2 ✓	N		
	1526	Br. Noddy	1 ✓	N		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

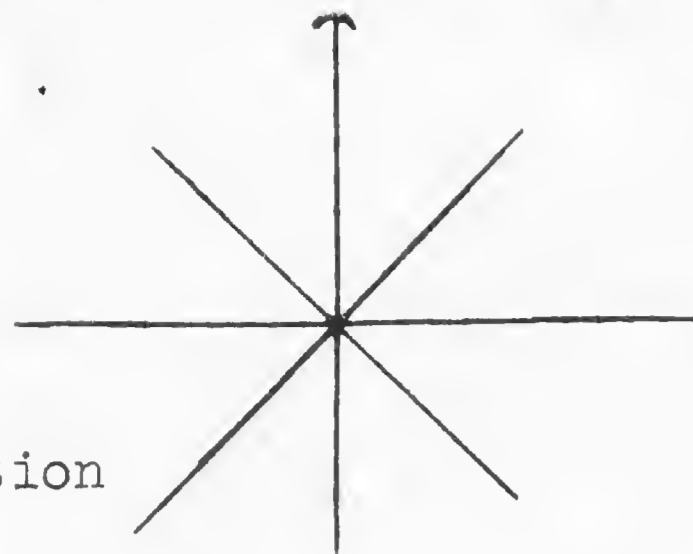
Baird, Walter
De Long
Stadel

Date 12 June 1967
Pg.# 2

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1535	sooty tern	2 ✓	W		
1536	WTS tern	1 ✓	N		LT
1540	Fairy tern	1 ✓	SE		
1545	WTS tern	2 ✓	SE		LT
1550	WTS tern	5 ✓	SW		LT
1555	WTS	1 ✓	SW		LT
1555	"	1 ✓	"		"
"	"	1 ✓	"		"
"	"	1 ✓	"		"
1558	"	1 ✓	"		"
1558	Sooty T	2 ✓	W		Adults.
1602	Frigate	1 ✓	SE		LT
1605	Wedge T	1 ✓	SW		"
"	"	1 ✓	SW		"
1605	"	1 ✓	NW		"
1610	"	1 ✓	SW		"
1615	"	1 ✓	SW		"
1618	"	1 ✓	W		"
1620	"	1 ✓	SW		"
23	"	1 ✓	"		"
25	"	1 ✓	"		"
28	"	1 ✓	"		"
1630	Sooty T	1 ✓	NW		
FP 1638	WTS	180 ±	SE		Feeding . WTS landing on water
	Sooty T	50 ±			
1642	WTS	3 ✓	SE		
1647	"	4 ✓	"		
1650	"	2 ✓	"		
1655	"	1 ✓	"		
1655	Sooty T	1 ✓	NW		
1657	Juan Fernandez	1 ✓	SW		Shear pet

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

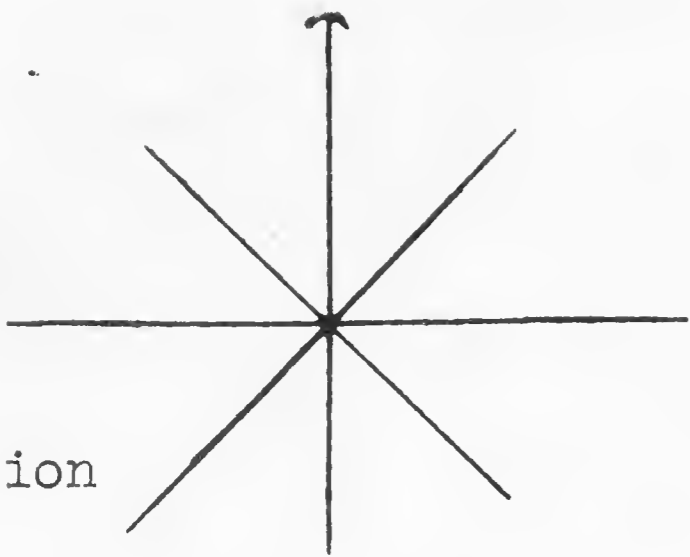
OBSERVERS:

Date 12 June
Pg. # 3

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1700	WTS	1✓	20		Lt
1702	"	2✓	"		
1705	"	3✓	"		
1707	"	1✓	"		
1710	"	2✓	"		
1715	"	2✓	"		
1717	"	1✓	"		
1720	"	1✓	"		
1725	"	1✓	"		
1730	"	3✓	"		
1733	"	2✓	"		
1737	"	1✓	"		
1740	"	3✓	"		
1745	"	1✓	"		
1745	Bulwers	1✓	S		
1800	WTS	1✓	20		Lt.
1810	"	2✓	"		"
1812	"	1✓	"		"
1816	"	1✓	"		"
1821	"	1✓	"		"
1822	ST	2✓	W		ad.
1825	BIP	2✓			
	WTS - Lt.	4✓			} on H ₂ O & see chow in the U ₂ = feeding
	BFA	4✓			
1829	WTS	2✓	20		Lt
1835	"	2✓	20		
1839	BIP	1✓	20		
1840	"	1✓	20		
1843	WTS	1✓	20		Lt.
1845	BIP	1✓	20		
1847	WTS	2✓	20		Lt.
1852	"	2✓	"		"
1856	"	1✓	"		"
1900	"	3✓	"		"
1901	Sooty tern	1✓	W		
1910	WTS	1✓	20		Lt

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 12 June
Pg. # 34

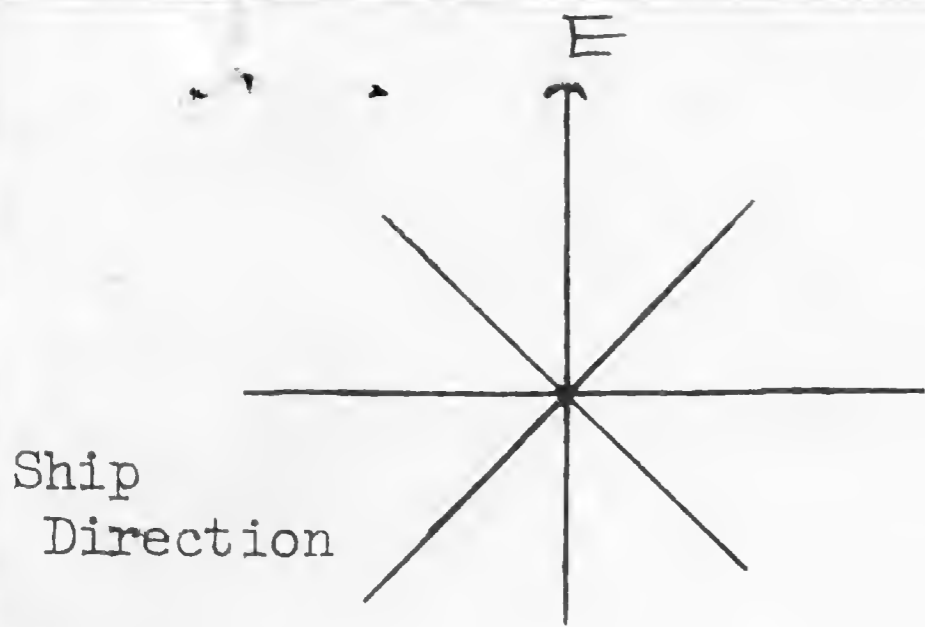
SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1907	WTSK.	5 ✓	88		L t
1910	"	2 ✓	"		"
FA 1920	"	7 ✓	"		"
1940	"	2 ✓	"		"
1950	"	2 ✓	"		"
2009	-				SS

13 Jan

BFA	- 1 - 1	2	2	✓
WTL	- 15 - 13	28 + 10 =	38	✓
B	- 1 - 1	2 + 3	5	✓
Sooty tern	21 - 34	55 + 22 =	77	✓
RTTB	4	4	4	✓
M. D. Tern	2 - 5	7 + 2	9	✓
Br Noddy	5	5	5	✓
HF	1	1 + 1	2	✓
Skua	1	1 + 1	2	✓
BFB	1	1 + 2	3	✓
BEP	1	1	1	✓
		<u>107</u>		
Newells			1	✓
RFB			2	✓ Ad. LA
HNT			1	
			<u>152</u>	

day total
86887



Ship
Direction

LT 2086

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

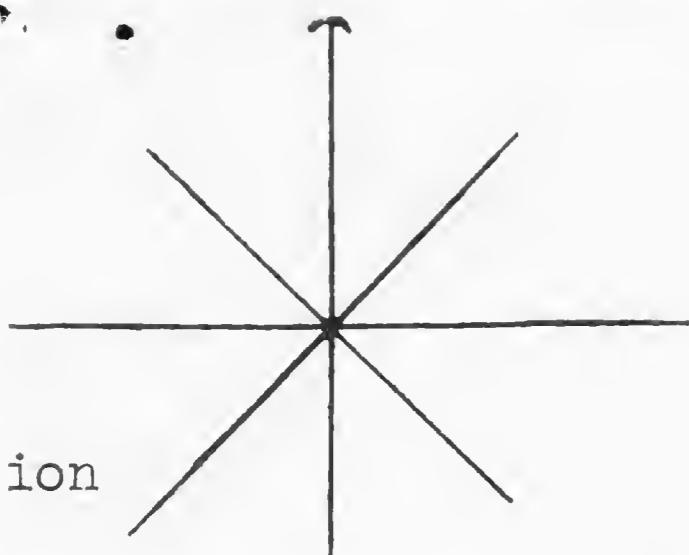
Burckhalter
DeLong
Stadel

Date 13 June 1967
Pg. # 1

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0730					Bogue obs.
0740	Sooty T.	3 ✓	E		ad.
0748	"	2 ✓	E		"
0749	WTS	2 ✓	⊙		
0800	WTS	1 ✓	⊙		LT.
0805	"	1 ✓	⊙		"
0806	ST	1 ✓	⊙		
0810	RTTB	1 ✓	⊙		ad
0814	ST	1 ✓	⊙		ad.
0844	Sooty T.	1 ✓	SW		"
0845	"	1 ✓	"		"
0845	Bulwers	1 ✓	S		
0846	RTTB	2 ✓	E		Ad
"	BEA	1 ✓	⊙		
0855	WTS	1 ✓	N		LT
0919	Sooty T	1 ✓	E		Ad
0921	WTS	1 ✓	⊙		LT
0927	Sooty T	1 ✓	⊙		Ad
0935	"	1 ✓	⊙		"
"	RTTB	1 ✓	N		Ad
0937	Sooty T	1 ✓	⊙		Ad
"	WTS	1 ✓	⊙		LT
0943	WTS	3 ✓	N		"
0950	Sooty T	1 ✓	⊙		Ad
0955	WTS	1 ✓	N		LT
1020	"	1 ✓	N		"
1025	"	2 ✓	⊙		"
1030	N-b Tern	2 ✓	⊙		ad.
1040	Sooty tern	2 ✓	E		
1041	Wedge-tail	1 ✓	⊙		LT
1048	Sooty tern	3 ✓	NE		Ad - toward F.F.
1055	"	2 ✓	"		"

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 13 June
Pg. # 2

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

	1105	BFA	1 ✓	SE	_____	Seen near feeding flock and came to ship
FF	1108	Sooty tern	25 ✓			
		B-B. tern	5 ✓			
		WTS tern	4 ✓			
	1115	WTS tern	1 ✓	N		
	1117	B. Noddy	1 ✓	NE		
	1122	WTS	1 ✓	SE	_____	LT
	1125	BFA	1 ✓	SE		
	1127	WTS	1 ✓	SE	_____	LT
	1130	"	2 ✓	"		"
	1137	"	1 ✓	"		"
	1147	"	2 ✓	"		"
	1150	"	1 ✓	"		"
	1155	B. Noddy	4 ✓	N		
	1157	ST	4 ✓	N	_____	ad
	1158	Bulwer's	1 ✓	SE		
	1201	ST	1 ✓	W	_____	ad.
	1207	SKua	1 ✓	N	_____	Reliability of 2. We are ahead of La Perouse
	1211	Sooty tern	1 ✓	N		Reminded F.F. The bird matches only the description of the skua. It was all dark reflecting only the white in the wings
	1215	Sooty tern	2 ✓	N		
	1226	BFB	1 ✓	N		
	1231	BIP	1 ✓	SE		
	1256	ST	1 ✓	SE	_____	ad.
	1300					was 20 - Taken by the 2087

Date 14 JUNE Ship LT 2086 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time 0606 Position: Lat. 22-24N, Long. 163-45W

Sunset: Time 1923 Position: Lat. 21-39N, Long. 159-57W

Miles travelled from 0000 hours to sunrise = 73

Miles travelled from sunrise to sunset = 159

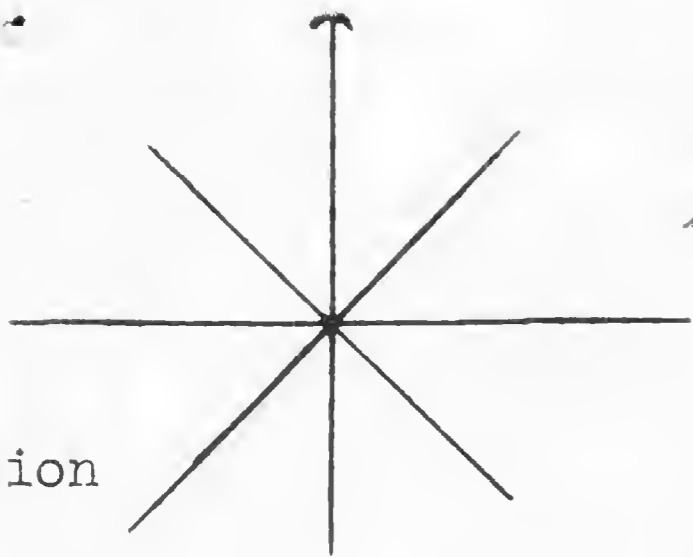
Miles travelled from sunset to 2400 hours = 56

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0800	LORAN	22-18N	162 23W
2.	1000	LORAN	22 10 N	161 59 W
3.	1825	VISUAL	21-42N	160 11 W
4.				
5.				

Hourly Positions:

Time Latitude Longitude ^{6 SP} Wind Dir. ^{CLOUD COVERAGE} Wind Sp. ^{6 HT} Wave Dir. ^{TEMP} Wave Hgt.

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
0100						
0200	22-43N	163-30				
0300						
0400	22-35N	163-05				
0500						
0600	22-25N	162-41	CALM	4	085-12	76
0700	22	36				
0800	22-18N	162 23 W				
0900	14	11				
1000	22-10N	161-59W				
1100	08	46				
1200	22-04N	161-33W	CALM	3	085 1-2	84
1300	01	20				
1400	21-58N	161-08W				
1500						
1600	21-53N	160-41W				
1700						
1800	21-42N	160-15W	CALM	3	085-1-2	82
1900						
2000	21-37N	159-51W				
2100						
2200	21-31N	159-25W				
2300						
2400	21-25N	159-01W	CALM	2		



Ship
Direction

LT 2086

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

De Long, S. J. & L.
Burke, L. L.

Date 14 June
Pg. # 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0645 LT 1 ✓ 644 LT

0645 LT 1 ✓ 644 LT

0700 " 1 ✓ " "

0705 White tern 1 ✓ W Travelling

0706 Ash-throated Tanager 1 ✓ 645 Ad. ♀

0710 WTS 1 ✓ " LT

0717 " 1 ✓ 646 "

0720 " 1 ✓ 647 "

0720 Sooty T 1 ✓ N Ad

0725 Bulwer's Pet 1 ✓ 648

0726 Sooty T 1 ✓ 649 possible Sooty T.

0729 Sooty T 2 ✓ 650 Ad.

0732 " 1 ✓ " "

0740 " 1 ✓ N "

0745 M-B Tern 1 ✓ E

0748 W-T Shear 1 ✓ 651 LT

0758 M-B Tern 2 ✓ E Ad

0808 Fairy T 1 ✓ S

0812 M-B Tern 1 ✓ W Ad

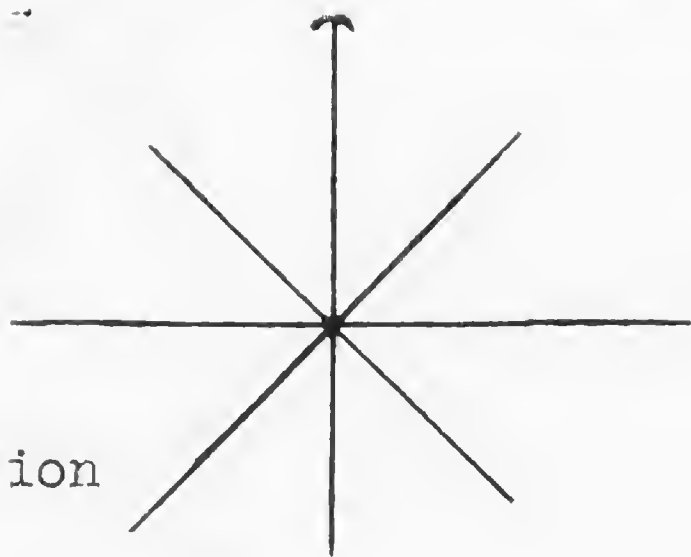
0813 WTS 1 ✓ 652 LT

0818 Bulwer's Pet 1 ✓ 653

0820 Large Pterodroma 1 ✓ 654 heavily mottled upper surface. Shining white underwing but flight was most in discord as it nearly flapped

0822 W-T Shear 1 ✓ 655 along surface - gliding at intervals. No other characteristic wave note!

0827 Sooty tern 1 ✓ N Ad



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

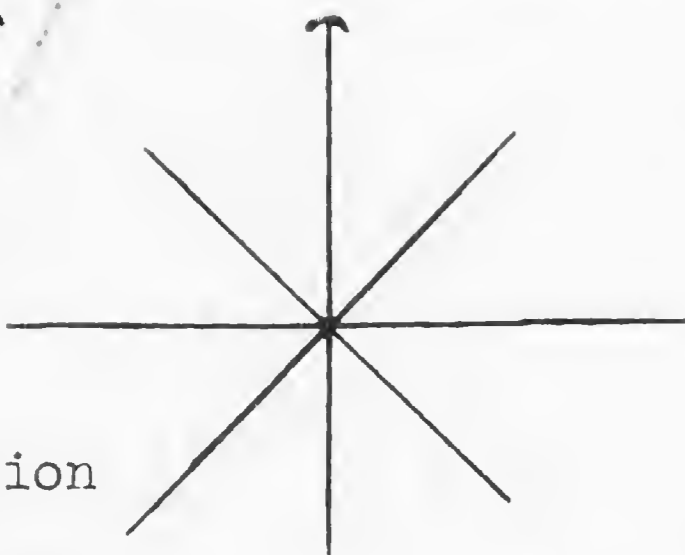
OBSERVERS:

Date 14 June 1967
Pg. # 2

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

	0830	Bulwer's Pet	1 ✓	SW		
	0831	RF Booby	1 ✓	W		ad Lt Ph.
	0840	Bulwer's Pet	1 ✓	SW		
	0842	WTS	1 ✓	SW		LT.
	0845	"	1 ✓	"		"
	0846	Noddy sp.	1 ✓	S		
	0847	WTS	1 ✓	SW		LT
	0855	Sterna sp.	1 ✓	SE		Flying High - Travelling
	0858	Pterodroma	1 ✓	SW		
	0900	Sterna sp.	1 ✓	N		foraging in <u>lunar</u>
	0905	WTS	2 ✓	SW		
	0912	Bul	1 ✓	SW		LT
	0916	"	1 ✓	SW		
	0917	ST	1 ✓	S		ad.
	0919	Bul	1 ✓	SW		
	0925	WTS	2 ✓	SW		LT.
	0928	Bul	1 ✓	SW		
	0933	Bul	1 ✓	SW		
	0935	WTS	4 ✓	SW		LT.
	0936	Bul	1 ✓	SW		
TF	0937	C. Nod.	8 ✓	SE		
	0938	WTS	1 ✓	SW		LT.
	0939	Bul	1 ✓	SW		
	0941	"	2 ✓	SW		
	0956	"	2 ✓	SW		
	0958	WTS	1 ✓	SW		LT.
	1000	ST	1 ✓	S		ad.
	1005	WTS	1 ✓	SW		LT.
	1009	Bul	2 ✓	SW		
	1010	GBT	1 ✓	E		ad.
	1017	WTS	1 ✓	SW		LT.
	1045	WTS	1 ✓	SW		
	1050	"	1 ✓	SW		
	1055	"	1 ✓	SW		
	1105	Common N	3 ✓	S		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

DeLong
Barkhalter
Stadel

Date 14 June
Pg. # 3

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

	1107	Bulwer's	1✓	NE		
	1110	Fairy T	1✓	S		
	1111	Bulwer's	1✓	S		
	1125	Frigate	1✓	el		Adult ♀
	1125	Sooty T	3✓	N		" "
FF	1130	Grey B T	38±	N		
	1130	Wedgetail	10✓	el		
	1150	Fairy T	2✓			
	1150	BFB.	1✓			
	1150	Shearwater				(Sooty / Slender B / Pale-foot)
		Sooty T	20±			
		Common N	25±			
		Haw NT.	5±			
	1145	G B T.	1✓			Sitting on Coconut.
	1215	WTS	1✓	3		Lt.
	1223	Bul	1✓	3		
FF	1230	BFB	8✓			
		BFA	3✓			
		LA	1			
		WTS	25±			
		ST	10±			
	1232	Bul	2✓	3		
	1237	Albatross				F. Tern 1
	1242	FT	1✓	3		
	1257	Bul.	1✓	3		
	1258	RFB	1✓	3		
	1259	"	1✓	on H ₂ O		
	1300	"	1✓	"		
	1301	WTS	1✓	0		Lt.
FF	1305	WTS	10±	3		Lt.
		RFB	8✓			6 ad 2 imm
		BB	1✓			"
		C. Vag	4✓			
	1310	ST	1✓	3		ad 2087 should take over now.
	cease	obs				

Date 13 June 67 Ship LT-2087 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time 0626 Position: Lat. 24-00W, Long. 167-28W

Sunset: Time 1945 Position: Lat. 23-08, Long. 165-58W

Miles travelled from 0000 hours to sunrise = 76 mi.

Miles travelled from sunrise to sunset = 158

Miles travelled from sunset to 2400 hours = _____

TIME OF FIX TYPE OF FIX LATITUDE LONGITUDE

1.

2.

3.

4.

5.

Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt. 16
20
36

0100							
0200							
0300							
0400							
0500							
0600	<u>24-01W</u>	<u>167-38W</u>	<u>095</u>	<u>7</u>	<u>100</u>	<u>3 Ft.</u>	
0700							
0800	<u>24-07W</u>	<u>167-19W</u>					
0900	<u>23-54</u>	<u>03-12</u>					
1000	<u>23-54</u>	<u>166-50W</u>					
1100	<u>58-18</u>	<u>37-13</u>					
1200	<u>23-40N</u>	<u>166-24W</u>					
1300	<u>35-32</u>	<u>11-23</u>					
1400	<u>23-30N</u>	<u>165-58W</u>					
1500	<u>25-25</u>	<u>43-16</u>					
1600	<u>23-19W</u>	<u>165-28W</u>					
1700	<u>14-25</u>	<u>14-10</u>					
1800	<u>23-10W</u>	<u>165-00W</u>					
1900	<u>7</u>	<u>50-10</u>					
2000	<u>23-04N</u>	<u>164-48W</u>					
2100							
2200	<u>23-00N</u>	<u>164-21W</u>					
2300							
2400	<u>22-50N</u>	<u>163-59W</u>					

Date 14 June

Ship LT2087 ()

Cruise No. 19

Organization _____

Recorder _____

Sunrise: Time 0600

Position: Lat. 22°30'N, Long. 162°50'W

Sunset: Time 1928

Position: Lat. 21°39', Long. 160°06'

Miles travelled from 0000 hours to sunrise = 70

Miles travelled from sunrise to sunset = _____

Miles travelled from sunset to 2400 hours = _____

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
--	-------------	-------------	----------	-----------

1.

2.

3.

4.

5.

72
6
8

1300 - 1928 - 88

6.6

70/43
1.5
43 1670
43
27.0
1.5
10 15

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
------	----------	-----------	-----------	----------	-----------	-----------

0100						
0200	22-42N	163-36W				
0300						
0400						
0500						
0600	22-30N	162-50W				
0700						
0800	22-18N	162-17W				
0900						
1000	22-12N	161-58W				
1100						
1200	22-03N	161 38 W				
1300	00	23				
1400	21-58	161-08W				
1500	55	160 56				
1600	21-52	160-44W				
1700	46	30	37			
1800	21-41	160-15W				
1900	21° 38'	160-08W				
2000	0					
2100						
2200						
2300						
2400						

18

10
2

43

22
3-70 38
6 22

32

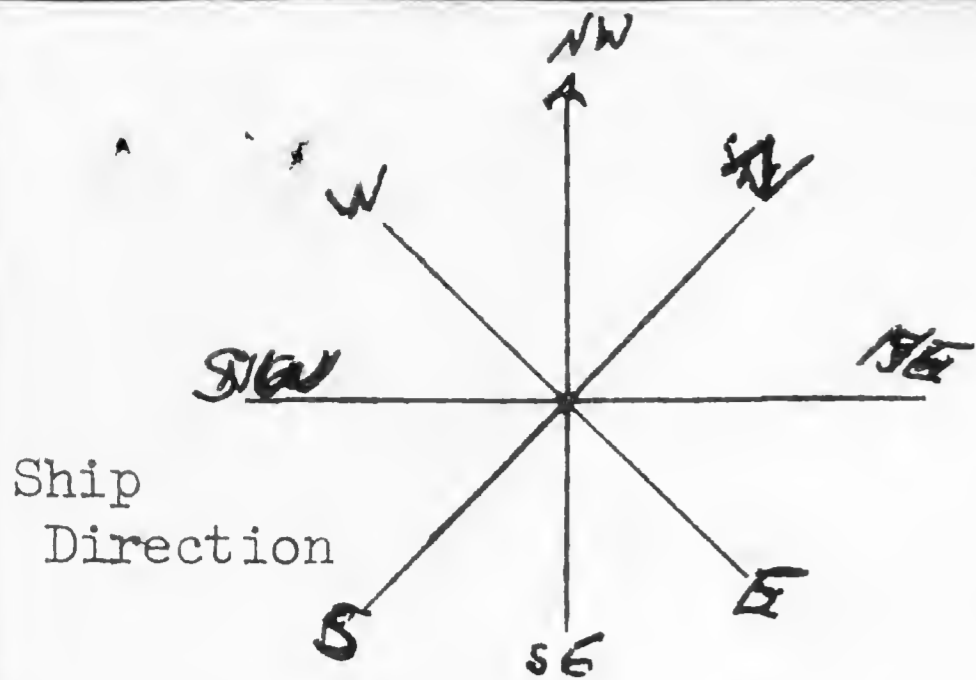
2087

24 May

Bulwer's	6	11	10	10	9	1	47 ✓
Sooty Tern	89	40	6	1	12	4	152 ✓
Shear/Pet	2		1		1	1	5 ✓
WT SL	134	231	5	20	16	8	414 ✓
Newell	1	1		1	1		4 ✓
Fairy Tern	21	17	13	6	2	3	62 ✓
Terns	41						41 ✓
C Noddy	1				4		5 ✓
Masked Frigate		1	2	1			4 ✓
X-I Shear		2					2 ✓
RF B		4	6	2			12 ✓
Another Shear			2				2 ✓
D-R Pet			1				1 ✓
Sooty Shear			1	1			2 ✓
B-B Tern				1		1	2 ✓
BFA				1	2		3 ✓
BFB					1		1 ✓
Laysan Petrel					1		1 ✓

756

760



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN
or

Diurnal

LT 2087

OBSERVERS:

SR-800 Toy

0800-1000 Thomp

1000-1200 J

1200-1400 J

1400-1600 T

1600-SS

Date 24 MAY 1967

Pg. #

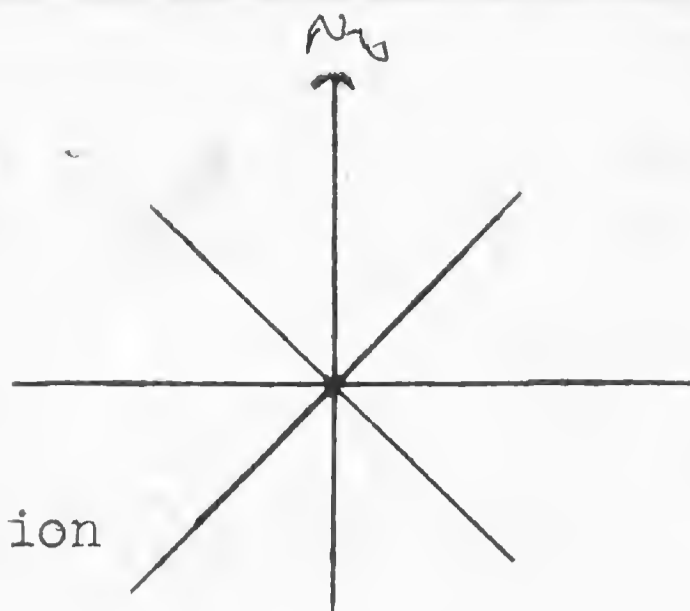
TIME SPECIES # DIR. BAND NO. REMARKS

	0609				SUNRISE open OBSERVATIONS
	0617	Bulwer's P.	1	⊙	
	0619	Sooty T.	2	SE	ADULTS
	0624	SHAY/Pet.	2	⊙	light below
	0625	W.T.S.	1	NE	light phase
	0626	Newell's	1	⊙	
	0630	Fairy T.	2	NE	
	0634	Sooty T.	1	E	adult
	0642	W.T.S.	1	SW	light phase
	0645	Tern sp.	1	NW	too distant to I.D. +
	0648	Common Noddy	1	NE	
FF	0652	W.T.S.	2	NE	light phase
	0655	W.T.S.	50±10	⊙	light phase
		Tern sp.	40-50	⊙	feeding
	0657	Sooty T.	1	NW	adult
	0705	W.T.S.	2	W	light phase
	0709	W.T.S.	1	W	light phase
	0710	Sooty T.	1	W	adult
	0712	W.T.S.	3	NE	light phase
	0715	W.T.S.	2	⊙	light phase
	0722	Fairy T.	1	⊙	
20	0723	Sooty T.	1	⊙	adult
FF	0728	Sooty T.	15±5	⊙	adults feeding
	0732	Fairy T.	1	⊙	
	0733	W.T.S.	1	NW	light phase
	0737	W.T.S.	2	NW	light phase
25	0745	W.T.S.	2	N	light phase
	0752	W.T.S.	1	SE	light phase
SF	0807	W.T.S.	35±5	SE	light phase? Bulwer's
		Sooty T.	40±5		Ad.
		Fairy T.	10±1		
	0808	Fairy T.	1		
	0811	W.T.S.	1		light phase
30	0815	Xmas Is. Shear	2	NW	? Bulwer's
	0820	Xmas Is. Shear	1	NW	? Bulwer's
FF	0827	Sooty T.	28±2		
		Wedgetails	30±3		
		Fairy Tern	6		
	0830	Xmas Is. Shear	1	SE	? Bulwer's
	0837	W.T.S.	1	NW	light phase

BFA-3 3
BFB-1 1
RFB-12 12
GF-4 4
S/P-5 5
WTS-415 411
Newell's 4 4
Bulwer's 45 47
DRP 1 1
Xmas S. 2 2
Leach's 1 1
Sooty S. 1 1
ST-150 152
BET-2 2
Arctic T-2 2
TSP-41 41
FT-62 62
CNT-5 5

602 756

756



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

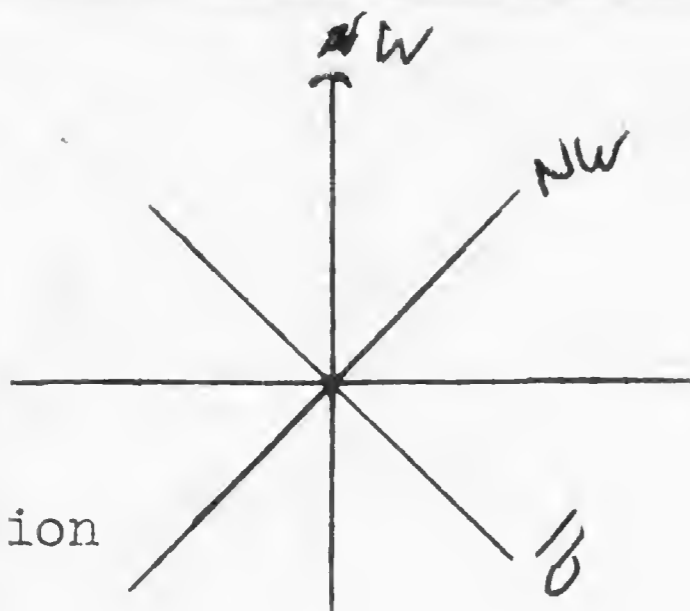
Date 24 MAY 1967
Pg. # 2

SPECIMEN
or

LT 2087

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0841	Bulwer's	1✓	SE		Positive
0843	W.T.S.	2✓	⊙		LT
	Xmas. Is. She.	1✓	⊙		? Bulwer's
0845	W.T.S.	3✓	⊙		LT
0846	W.T.S.	2✓	⊙		LT
0849	Fairy T.	1✓	NW		
0852	Bulwer's	1✓	E		Positive
SF 0857	W.T.S.	50±5✓	SE		LT
0858	Bulwer's	1✓	SE		
0859	Fairy T.	3✓	E		
SF 0900	G. Frigate	1✓	⊙		SAND.
	W.T.S.	20+✓			LT
	Bulwer's	1✓			
0906	Bulwer's	1✓			
0908	Xmas. Is. She.	1✓	NE		?
FF 0912	Bulwer's	1✓	NE		
0915	WTS	120±10	⊙		LT
	ST	40±5	⊙		Ad
	FT	8±7	⊙		
0917	Bulwer's	1✓	N		
0918	WTS	1✓	SE		LT
0921	FT	1✓	N		
0926	Bulwer's	1✓	NW		
0938	Bulwer's	1✓	⊙		
0946	W.T.S.	1✓	NE		LT
0949	WTS	3✓	S		LT
0950	FT	2✓	N		
0951	W.T.S.	1✓	N		
SF 0954	Newell's	1✓	NE		
	Bulwer's	1✓			
	W.T.S.	25±2			LT
0958	W.T.S.	1✓	N		LT.
1006	W.T.S.	2✓	⊙		LT.
1007	F.T.	1✓	NE		
1010	XMAS IS	1✓	⊙		came in close - too large for Bulwer's
1026	F.T.	1✓	⊙		
1027	R.F.B.	4	⊙		lt. ph. adults feeding

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN
or

Diurnal

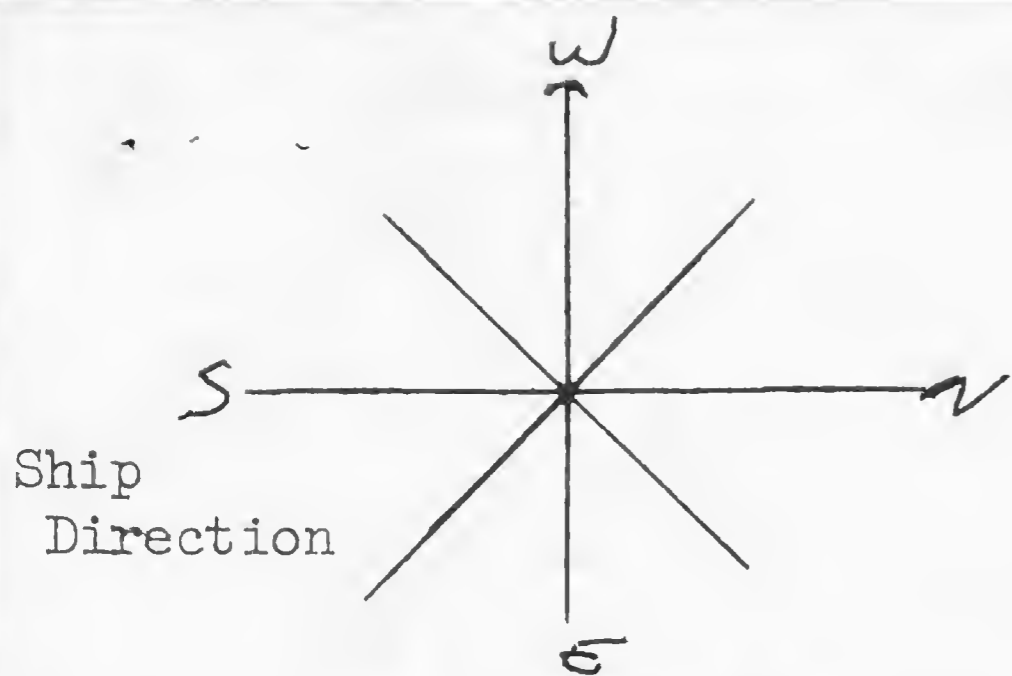
LT 2087

OBSERVERS:

1000-1145 TOX
1145-0200 THOMPSON

Date 24 May '67
Pg. # 3

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1033	Sooty T.	2✓	S		adults
1034	F.T.	1✓	⊙		
1040	Bulwer's	1✓	⊙		
1040	Sooty T.	1✓	S		adult
1041	F.T.	1✓	⊙		
1047	W.T.S.	1✓	N		feeding.
1047	F.T.	1✓	N		LT.
1050	RFB	1✓	⊙		- flying over W.T.S.
1050	Bulwer's	1✓	⊙		INT PH. adult
1118	Bulwer's	1✓	⊙		
1122	F.T.	1✓	SE		
1124	Bulwer's	2✓	SE		
1125	W.T.S.	1✓	⊙		LT.
1133	Bulwer's	1✓	⊙		
1134	F.T.	1✓	N		
1135	R.F.B.	1✓	⊙		INT PH. ADULT
1145	F.T.	2✓	⊙		
1145	Arctic Terns	2✓	N		seen together but King T.s flew alt
1159	Shear/pet.	1✓	W		in other direction - Ad's, Black caps - light
1200	G. Frigate	1✓	NW		gray backs, long forked tail and etc.
1201	FT	1✓	SW		very distant
1211	RFB	4✓	E		3 LT / INT - all Ad.
1211	ST	3✓			Ads
1211	W.T.S.	3✓			2 DP LT
1211	G Frigate	1✓			♀ Ad
1218	F.T.	1✓	E		
1222	DRP	1✓	N		
1225	Bulwer's	1✓	NW		
1226	FT	1✓	N		
1231	Bulwer's	1✓	NW		
1235	FT	1✓	SW		
1240	FT	1✓	N		
1245	Bulwer's	1✓	N		
1250	"	1✓	N		
1251	FT	1✓	N		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN
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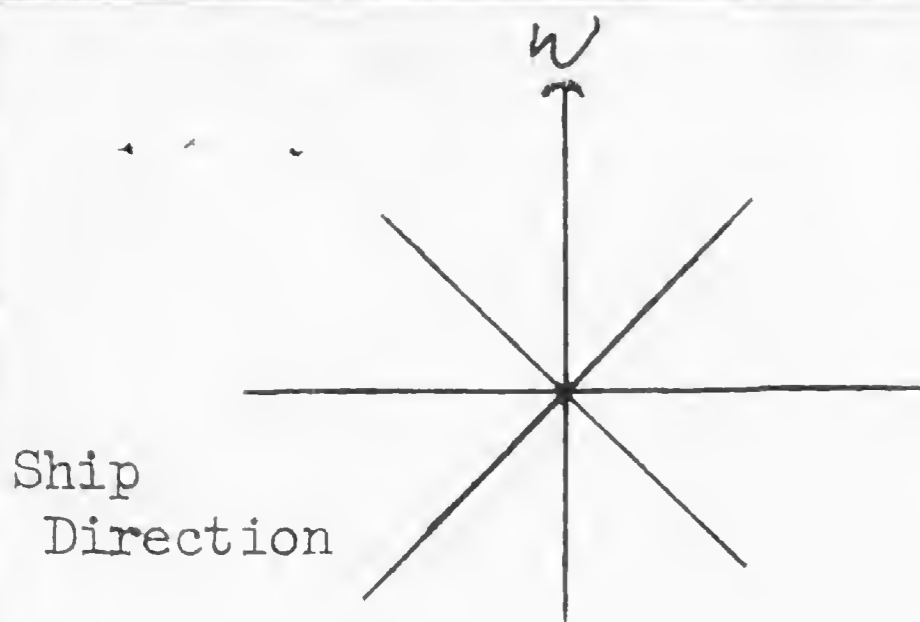
Journal
on LT 2087

OBSERVERS:

1145-1400 Thompson
1400-1600 - TVX
1600-SS - Thompson

Date 24 MAY 1967
Pg. # 4

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1305	FT	1 ✓	SE		
1323	Sooty shr.	1 ✓	W		
1330	FT	1 ✓	E		
1335	Bulwer's	1 ✓	E		
1337	Bulwer's	1 ✓	W		
1340	RFB	2 ✓	E		LT, INT-Ads
1340	FT	1 ✓			
1345	GBT	1 ✓	N		DD.
1352	Newell's	1 ✓	NW		
1353	FT	1 ✓	NE		
1415	F.T.	1 ✓	N		
1422	W.T.S.	3 ✓	N		lt ph.
1422	Bulwer's	1 ✓	N		
1424	W.T.S.	1 ✓	N		lt ph.
1505	Bulwer's	1 ✓	E		
1508	Blackfooted ALB - 1 ✓	1 ✓	W.		adult
1510	WTS	1 ✓	N		lt ph.
1510	Bulwer's	1 ✓	N		
1523	W.T.S.	1 ✓	⊙		lt ph.
1523	F.T.	1 ✓	⊙		
1523	Gr. Frig.	1 ✓	⊙		
1531	W.T.S.	2 ✓	⊙		♂ adult having overhead
1532	Bulwer's	1 ✓	E		lt. ph.
1533	W.T.S.	1 ✓	E		lt ph.
1536	W.T.S.	1 ✓	E		lt ph.
1541	W.T.S.	1 ✓	E		lt ph.
1549	W.T.S.	1 ✓	E		lt. ph.
1553	Bulwer's	1 ✓	⊙		
1559	W.T.S.	1 ✓	E		lt ph.
1606	Bulwer's	1 ✓	E		
1609	W.T.S.	1 ✓	N		LT
1610	Bulwer's	1 ✓	E		
1614	W.T.S.	1 ✓	N		LT
1615	WTS	1 ✓	NE		LT
1616	"	1 ✓	NE		LT
1617	"	1 ✓	SE		LT
1621	Bulwer's	1 ✓	W		
1623	S.T.	1 ✓	E		DD
1623	W.T.S.	1 ✓	N		LT
1624	W.T.S.	1 ✓	N		LT
1624	W.T.S.	1 ✓	SE		LT



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN
or

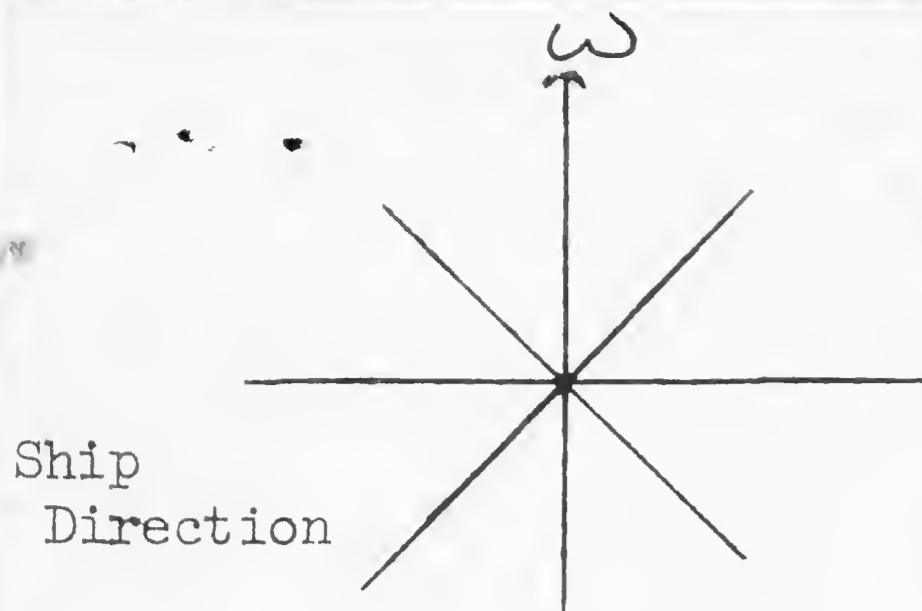
OBSERVERS:

1600-55 Thompson

Date 24 MAY 1967
Pg. # 5

Diurnal
LT 2087

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1631	ST	1	E		Ad
1635	ST	3	NE		Ad
1635	W.T.S.	1			
1640	W.T.S.	1	SE		LT RT
1644	S.T.	1	E		Ad
1645	S.T.	1	E		Ad
1646	CNT	1			
1647	FT	1	E		Sit on a piece of Kotsam, Ad.
1652	CNT	3	E		Ad.
1652	FT	1	E		
1653	BKA	1	⊙		Ad.
1655	W.T.S.	2	⊙		RT.
1657	Shen/pet.	1	W?		Very distant - are on horizon
1700	Bulwer's	1	N		
1703	BFA	1	⊙		
1708	W.T.S.	2	⊙		RT
1710	Bulwer's	2	E		
1715	W.T.S.	2	N		RT
1716	Bulwer's	1	SE		
1721	Bulwer's	1	SE		
1722	W.T.S.	1	E		RT
1725	ST	3	E		Ad.
1728	Bulwer's	1	NE		
1729	Bulwer's	1	NE		
1731	W.T.S.	1	E		Ad.
1740	S.T.	1	NE		Ad.
1803	W.T.S.	3	E		lt ph.
1807	B.F.B.	1	W		immature
1810	W.T.S.	1	W		lt. ph.
1811	Leach's	1	⊙		
1812	Bulwer's	1	⊙		
1820	Bulwer's	1	E		
1826	Newell's	1	SE		
1828	Sooty T.	2	E		Ad.
1830	W.T.S.	1	N		LT
1836	"	1	N		RT



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

1600-55 Thompson

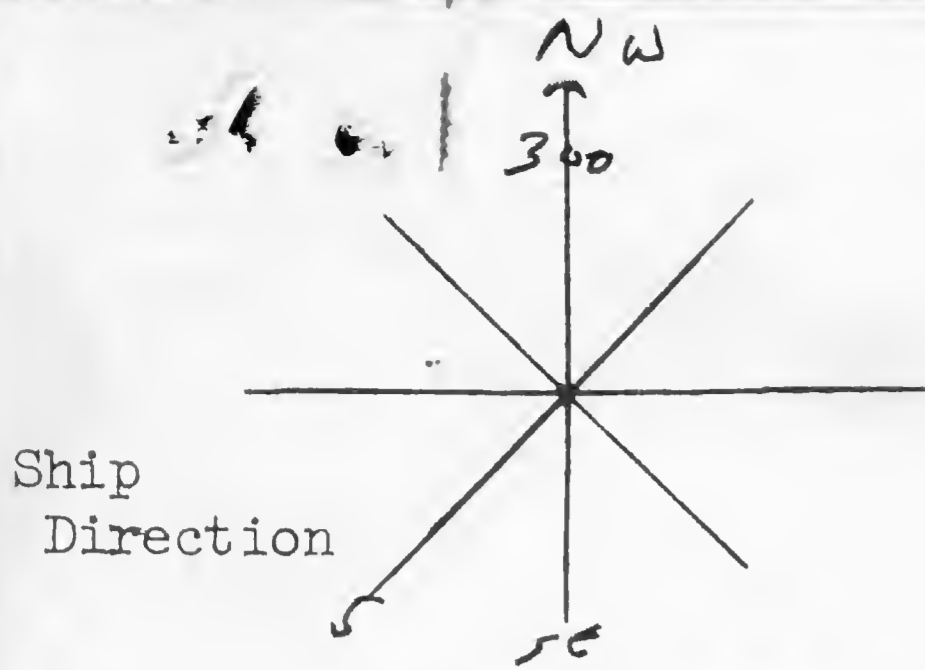
SPECIMEN
or

Diurnal
LT-2087

Date 24 MAY 1967
Pg.# 6

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1845	Shear/pet	1✓	E		white a-c in horizon ? WTS
1854	W.T.S.	1✓	W		2+
1855	W.T.S.	2✓	E		2+
1857	S.T.	3✓	N		Ad.
1858	F.T.	1✓	⊙		
1903	W.T.S.	2✓	E		2+
1904	F.T.	1✓	E		
1905	GBT	1✓	N		
1906	Bulwer's	1✓	W		
1909	W.T.S.	2✓	W		2+
1911	W.T.S.	1✓	N		2+
1914	S.T.	1✓	NW		Ad.
1920	F.T.	1✓	N		

1923-55



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:
512-0800 Thompson

Date 25 MAY 1967
Pg. # 1

SPECIMEN
or

Diurnal

LT 2087

TIME SPECIES # DIR. BAND NO. REMARKS

0617	BFA	1✓	0		Following ship - 270
0619	Bulwer's	2✓	SE		
0621	Sooty T.	2✓	E		Ads
0625	BFA	1✓	0		Following LT 2076
0626	WTS.	1✓	E		2+
0629	BFA	1✓	0		Follows ship
0630	W. T. H. C.	1✓	0		
0631	Sooty Tern	2✓	NE		Ads.
0635	ST	3✓	NE		Ads.
0636	ST	7✓	E		Ads.
0637	WTS.	1✓	N		2+
0638	ST	4✓	E		Ads.
0639	ST	5✓	NE		Ads.
0640	ST	3✓	E		Ads.
0641	CNT	2✓	NE		
0642	WTS	1✓	E		2+
0642	ST	1✓	E		Ad.
0648	CNT	2✓	E		
0649	ST	1✓	E		Ads.
0653	BFA	2✓	0		total at 5 following ship at this time
0655	W. L. S.	1✓	NW		
0656	CNT	1✓	NE		
0657	ST	1✓	E		Ad.
0658	CNT	1✓	NE		
0659	Bulwer's	1✓	E		
0700	S.T.	1✓	E		Ad
0701	CNT	1✓	E		
0702	Bulwer's	2✓	E		
0703	W. L. S.	1✓	N		
0704	C. Frigate	1✓	0		OVER - LT 2086, 2081
0707	ST	1✓	E		Ad - COURSE 240
0714	ST	2✓	N		
0715	Bulwer's	1✓	E		Ads.
0718	Bulwer's	1✓	E		
0722	W. T. S.	1✓	NW		2+
0724	Bulwer's	1✓	SW		
0725	ST	1✓	SE		Ads.
0726	CNT	3✓	N		

Layan A 4
52 BFA 39 41

WTS 205
Small Pterod 1

4 Bulwer's 16 17

W. L. S. 2

RKB 7 3

2 RKB-3 3

WT 1

Phalarope? 1

ST 35 435

CNT 14

HNT 1

FT-4

S/P 1

Flocks

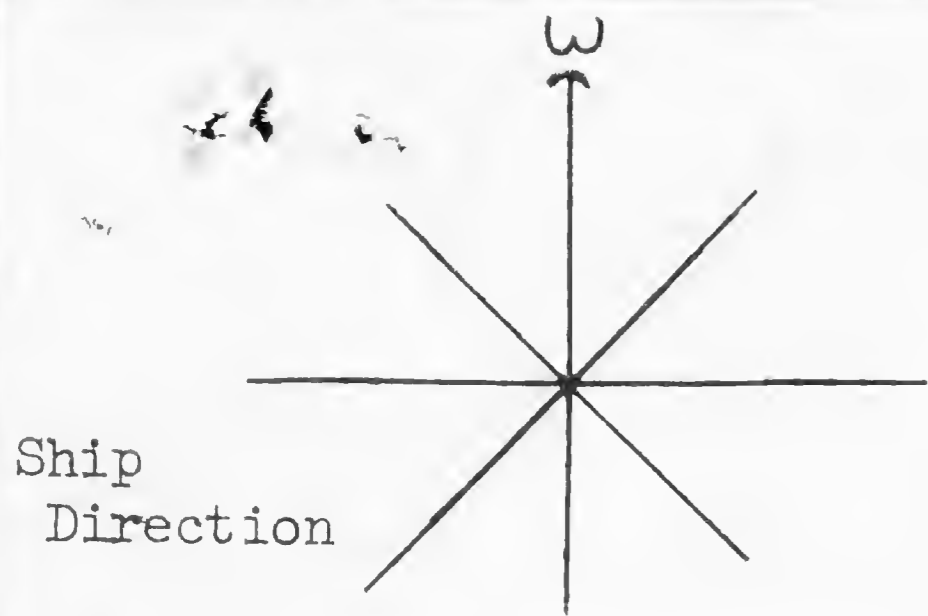
9-590

647-928

727

736

137
397
434



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

512-0800 THOMPSON
0800-1000 - TUX
0630 - Thompson

Date 25 MAY 1967
Pg. # 2

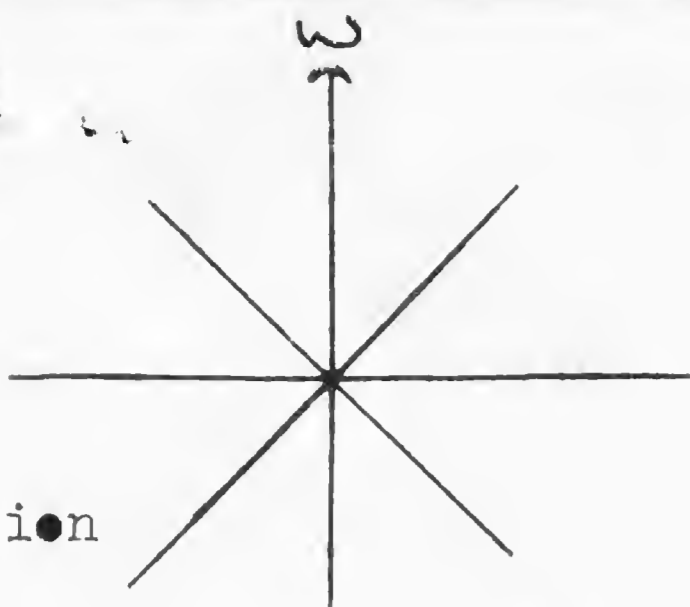
SPECIMEN
or

Diurnal

LT-2087

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0730	W.T.S.	1 ✓	W		2+
0732	W.T.S.	1 ✓	SW		2+
0733	Bulwer's	1 ✓	NE		
TF 0735	CWT	4 ✓	N		Ad.
	ST	1 ✓			
0738	BFA	9 ✓			
	Laysan A	1 ✓			all following ship
0745	W.T.S.	2 ✓	S		
					(commencing at 0800 (1/2 HOURLY ALBATROSS COUNT ONLY))
0755	Sooty T.	1 ✓	N		adult
0800	B.F.A.	6 ✓			following ship.
0810	W.T.S.	1 ✓	⊙		lt. ph.
10 0815	Laysan A	1 ✓	⊙		following ship.
0816	W.T.S.	1 ✓	⊙		lt. ph.
0825	W.T.S.	1 ✓	NE		lt. ph.
0827	Sooty T.	1 ✓	NW		adult
0830	B.F.A.	5 ✓	⊙		following ship.
0830					close obs within sight of Terns F.F.S.
1630					open obs. about 5 mi. off Tern Island F.F.S.
1635	BFA	1 ✓	SE		
1638	FT	2 ✓	⊙		FS.
1640					feeding
1640	Laysan A	1 ✓	⊙		2 T. noddies sp.
1644	Sooty T	3 ✓	SE		FS.
1650	BFA	2 ✓	⊙		Ad.
20 1654	ST	1 ✓	⊙		FS.
1656	Shen/pet	1 ✓	W		Ad.
			SW		?
1701	BFB	1 ✓	NE		Pterodroma
1702	HNT	1 ✓	NE		Ad.
1703	S.T.	2 ✓	⊙		Ad.
25 1704	W.T.S.	1 ✓	E		2+
1706	Bulwer's	1 ✓	N		
1708	ST	2 ✓	E		Ad.
1717	FT	1 ✓	E		

Count - 27 -



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN

Diurnal *leewards*

OBSERVERS:

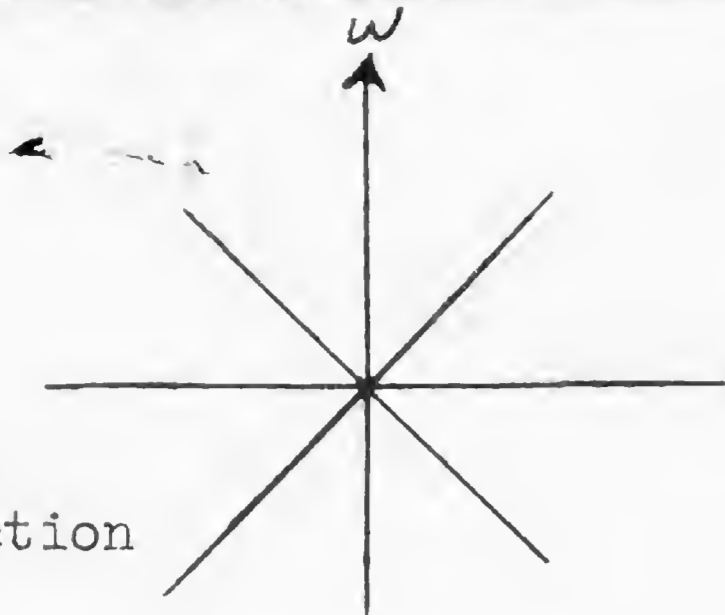
1630-1745 Hampton
1745-SS TUX
1941

Date *25 MAY 1967*
Pg. # *3*

	TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
	1721	W.T.S.	1 ✓	E		at
	1734	S.T.	1 ✓	S		DD.
	1737	ET	1 ✓	SE		
SF	1744	Sooty T.	34 ✓	E		adults 3 loosely grouped.
		W.T.S.	2 ✓	E		lt ph
	1745	B.F.A.	1 ✓	⊙		following ship.
	1748	Gr. Frig	1 ✓	⊙		
	1750	Bulwer's	1 ✓	NW		
	1751	B.F.B.	2 ✓	E		adults.
	1753	WTS	1 ✓	W		lt ph
	1754	R.F.B.	1 ✓	E		lt ph adult
	1754	Sooty T.	2 ✓	E		adults.
	1755	B.F.A.	1 ✓	W		
	1756	Sooty T.	1 ✓	E		adult
TF	1803	Sooty T.	5 ✓	E		adults
	1805	W.T.S.	3 ✓	E		lt phase
	1807	W.T.S.	3 ✓	E		lt ph.
FF	1815	Sooty T.	60 ± 5 ✓	⊙		adults
		W.T.S.	75 ± ✓	⊙		lt phase
		Bulwer's	4 ✓	⊙		
		R.F.B.	2 ✓	⊙		lt ph adults.
FF	1820	Sooty T.	135 ✓	⊙		adults
		W.T.S.	50 ✓	⊙		lt phase
	1824	Gr. Frig.	1 ✓	⊙		adult ♀
		Laysan Albat	1 ✓	⊙		
FF	1830	BFA	2 ✓	⊙		
		W.T.S.	10 ✓	⊙		lt ph.
		Sooty T.	60 ± 5 ✓	⊙		adults.
	1834	W.T.S.	4 ✓	W		lt ph.

46

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

-55- Tux

1941

Date 25 May '67

Pg. # 4

SPECIMEN
or

LT 2087

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1843	W.T.S.	1✓	W	—	lt. ph.
1850	B.F.A.	1✓	⊙	—	
1851	W.T.S.	1✓	N	—	lt. ph.
1855	Phalarope sp	1✓	⊙	—	flew into near bow then sat on water — gray back — light wing markings —
FF 1900	BFA	3✓	⊙	—	
	Sooty T	90✓	⊙	—	adults
	W.T.S.	40✓	⊙	—	
1905	Pterodroma small	1✓	E	—	lt ph } all feeding very heavily — W.T. & ALB - sitting on water. Bunched together
1908	Sooty T.	1✓	E	—	? Bonin Island?
1911	Bulwer's	1✓	E	—	adult.
1912	Sooty T	1✓	E	—	
1915	BFA	2✓	⊙	—	adult.
1923	BFA	1✓	E	—	
1928	Bulwer's	1✓	⊙	—	
1930	W.T.S	2✓	NW	—	lt ph.
1940	BFA	2✓	⊙	—	following ship.
1941					SUNSET END OBS.

Laysan Albi		3	1		4 ✓
BFA/baturn	5	23	4	89	41 ✓
Bulwers	8	2	5	2	17 ✓
Sooty tern	34	11	295	92	435 ✓
W-T Shear	4	8	149	44	205 ✓ - 1
C-N Tern	10	4			14 ✓
WRSP	2				2 ✓
B-Frigate	1		2		3 ✓
FT		3	1		4 ✓
Shear/pet		1			1 ✓
HNT		1			1 ✓
BFB		1	2		3 ✓
RFB			3		3 ✓
Phalarope		27		1	1 ✓
Pterodroma small	67		267	1	1 ✓
				149	

Wandering Tattler

1

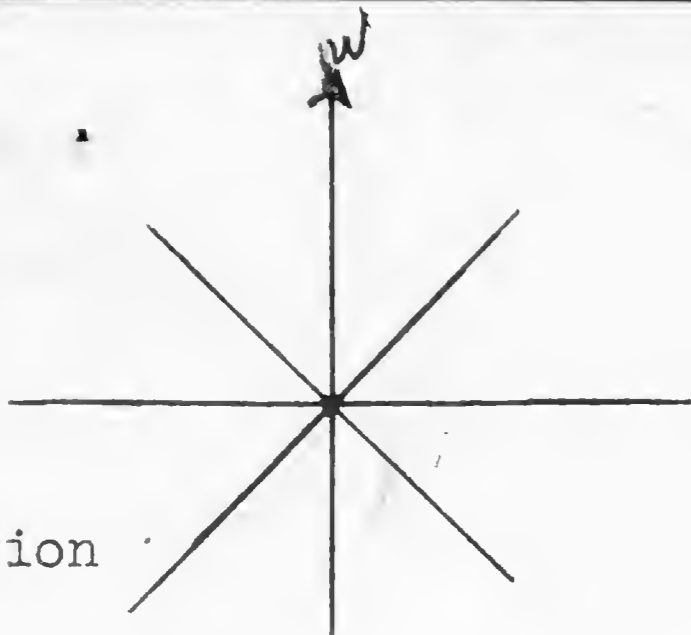
1
736

9 flocks

2082
25 May 1967

Two Tursions
1640 after isl
F.F.

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

SR0800 Tux

SPECIMEN
or

LT2087

Date 26 May '67
Pg. # 1

TIME SPECIES # DIR. BAND NO. REMARKS

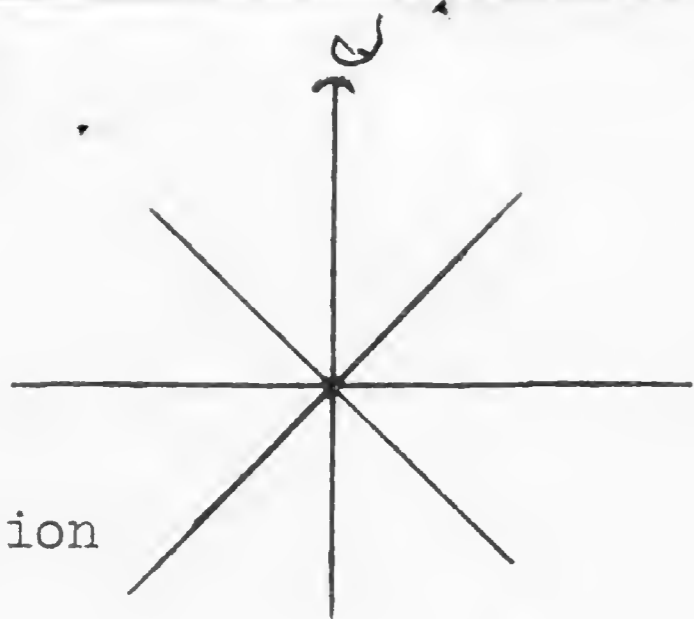
0633					SUNrise Begin OBS - (W - 270 - 285°)
0645	W.T.S.	1	W	lt ph	GARDINER'S Pinnacles in Sight.
0650	G.B.T.	2	E	adults	
0700	G.B.T.	2	SW	adults	K A 1 ✓ BFA 1.7 ✓ WTS 150 ✓ Pulver 5 ✓ BTB - 1 ✓ GF 2 ✓ GBT - 8 ✓ BGN - 2 ✓ CNT - 3 ✓
0704	W.T.S.	1	W	lt ph	
0714	B.G.N.	1	@		40 50 15 4-307
0715	B.F.B.	1	o	adult.	
0719	G.B.T.	1	o	adult	400
0719	B.F.A.	1	@		
0720	W.T.S.	1	o	lt. ph.	close obs. as LT. near pinnacles
0728	G.B.T.	3	o	adults	
0730	W.T.S.	1	W	lt ph	within 1 mile. Gardiner's.
0730	B.G.N.	1	@		

Not in
ADP
FORMS

Count around the pinnacles

5 BFB - 1 sub Ad. (ca 30)
BGN
GBT - many - immatures (ca 1000)
GF 60+ over island
HNT - 3+
RTTB
ST -
R.T. - 1
BB - 11
FT - 120

(BGN - in Primaries molt)
RTTB - carrying 3 prs.



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS LEEWARDS
AT SEA DAILY LOG - E

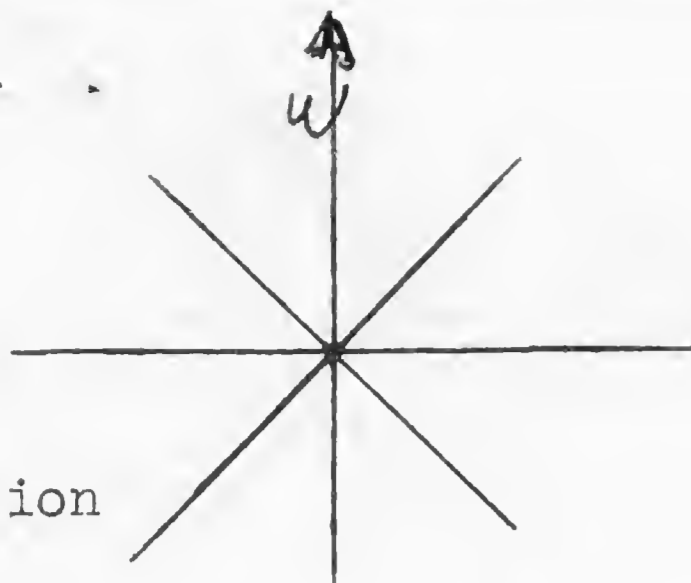
OBSERVERS:
1200-1400 Thompson
1400-1600 Tux
1600-1800 Thompson
1800-SS - Tux

Date 26 May 1967
Pg. # 2

SPECIMEN LT 2087
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1200					open observation - Smiles at
1205	BFA	1	2		following ship
1212	CNT	1	NE		
TF 1240	ST	5	W		Ad.
1241	CNT	1	E		
1300	W.T.S.	1	NE		2+
ST 1305	W.T.S.	1	E		2+
1314	BFA	1	⊙		Following ship - total = 2
1334	W.T.S.	1	E		2+
1337	S.T.	2	E		Ad.
1345	G. Frigate	1	E		Ad ♀.
1349	Bulwer's	1	N		
1354	S.T.	1	W		Ad.
1356	S.T.	4	SW		Ads.
1358	W.T.S.	1	W		2+
1359	Bulwer's	1	S		
1407	CNT	1	S		
1407	W.T.S.	1	S		lt ph
1424	W.T.S.	2	N		lt ph
1426	B.F.A.	2	⊙		following ship.
1432	Sooty T.	1	E		adult
1436	W.T.S.	1	S		lt ph.
1452	W.T.S.	2	W		lt ph.
1504	Bulwer's	1	⊙		
1513	Sooty T.	1	NE		adults
FF 1525	Sooty T.	85 ± 15	⊙		adults
	Fairy T.	1	⊙		
	W.T.S.	15	⊙		lt ph. } feeding
	Gr. Frig.	1	⊙		hovering
1548	W.T.S.	1	W		lt ph.
1556	W.T.S.	1	⊙		lt ph.
1610	Bulwer's	1	E		
1615	W.T.S.	1	W		Ad.
1628	W.T.S.	1	N		Ad.
1639	Bulwer's	1	⊙		
1651	W.T.S.	1	SW		2+
1653	W.T.S.	1	S		2+

$$\begin{array}{r} 11 \\ 150 \\ 211 \\ 39 \\ \hline 400 \end{array}$$



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

1600-1800 Thompson
1800-2200 ~~Thompson~~

Date 26 MAY 1967
Pg. # 3

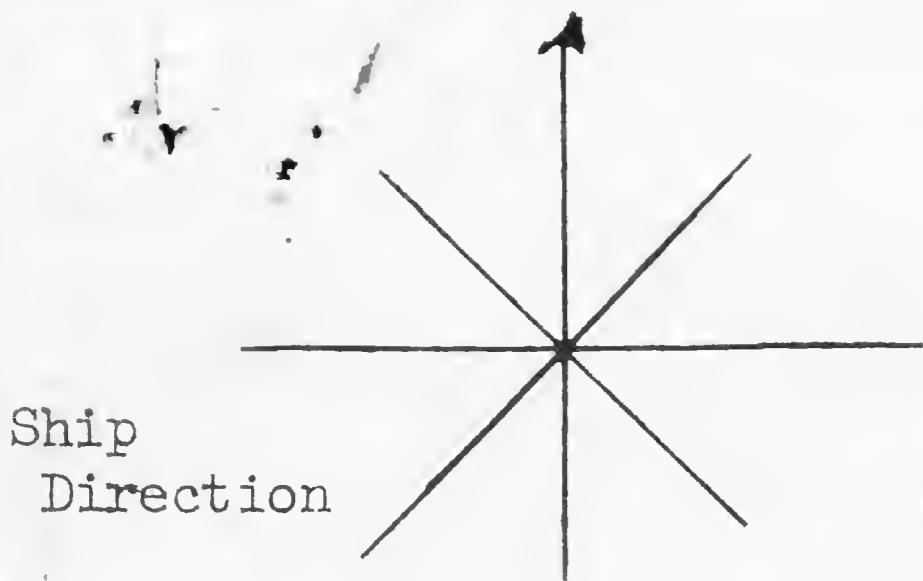
SPECIMEN
or

LT 2087

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1705	BFA	6	O		following ship
1710	W.T.S.	1	E		lt.
1711	"	1	W		lt.
1715	W.T.S.	3	W		lt.
1717	W.T.S.	1	E		lt.
1725	W.T.S.	1	NW		lt.
1726	BFA	2	N		
1745	W.T.S.	1	N		
FF 1745	Sooty T.	45	⊙		lt. ph. } breeding
	W.T.S.	40	⊙		adults }
1755	W.T.S.	1	E		lt. ph.
FF 1804	W.T.S.	50 ± 10	⊙		lt. ph.
	Sooty T.	65	⊙		adults
1819	W.T.S.	2	NE		lt. ph.
1823	W.T.S.	2	⊙		lt. ph.
1830	W.T.S.	3	W		lt. ph.
1831	Sooty T.	2	SW		adults
1850	W.T.S.	3	W		lt. ph.
1858	Laysan Albatross	1	⊙		following ship
1858	B.F.A.	4	⊙		" "
1906	W.T.S.	3	W		lt. ph.
1924	W.T.S.	1	W		" "

2004

Sunset end obs.



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

SR-800 Thompson

SPECIMEN
or

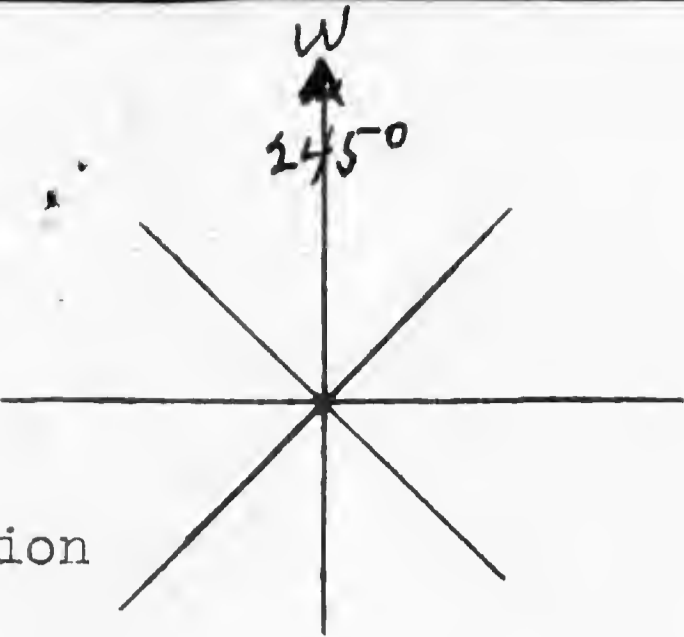
LEEWARDS

LT2087

Date 27 May '67
Pg. # 1

TIME SPECIES # DIR. BAND NO. REMARKS

0635					Sunrise begin obs.
	Laysan A	1✓	Q		around ship
0639	L.T.S.	2✓	N		2+
643	W.T.S.	1✓	NE		2+
0645	Bonin B. P.	2✓	N		
0646	Laysan A	1✓	E		
0647	BIP	1✓	N		
0655	BFA	3✓	Q		Following ship
	W.T.S.	1✓	E		
	W.T.S.	2✓	N		
0700	Sterna sp.	1✓	N		Arctic? p. not GST?
0701	W.T.S.	2✓	N		2+
0702	BIP	2✓	N		
0703	LA	2✓	Q		2 flocks (2F)
704	W.T.S.	4✓	N		2+
0705	W.T.S.	10✓	Q		one sweep at the horizon - Lt all.
0706	B.I.P.	2✓	N		
0708	Xmas B.	1✓	N		
0711	BIP	2✓	N		
0714	BIP	1✓	N		
0715	W.T.S.	1✓	N		2+
0716	BIP	1✓	S		
0717	ST	2✓	E		Ad.
0717a	W.T.S.	1✓	N		2+
0718	W.T.S.	1✓	NW		2+
0719	BFA	1✓			
0719	WTS	1✓			
0720	W.T.S.	1✓	N		2+
0721	W.T.S.	1✓	E		2+
0724	Bulwer's	1✓	N		2+
0725	W.T.S.	1✓	N		2+
0727	W.T.S.	2✓	N		2+
0728	W.T.S.	3✓	N		2+
	Laysan A	1✓			
0729	BFA	1✓	NW		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN
or

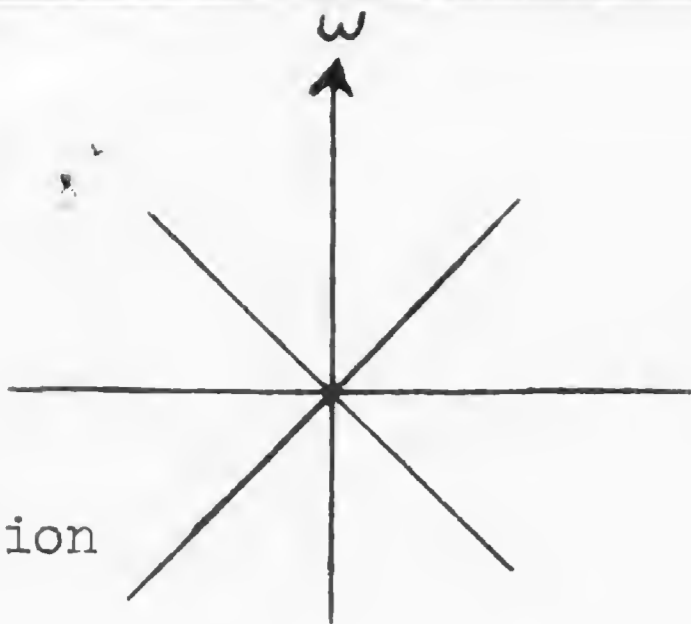
Leeward
LT-2087

OBSERVERS:

SL-0200 Thompson
0800-1000- Tux

Date *27 MAY 1967*
Pg. # *2*

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0730	W.T.S.	2 ✓	N		2+
0731	RFB	1	N		Ad, LT
0734	WTS	5 ✓	N		1+
0734	LA	2 ✓			} ne sweep of horizon
0734	PKA	1 ✓			
0740	LA	1 ✓	S		
0740	WTS	8 ✓	N		} Horizon Sweep.
0740	S.T.	10 ✓	N		
0741	ST	2 ✓	N		Ad.
TF 0744	W.T.S.	6 ✓	N		2+
0745	W.T.S.	2 ✓	N		2+
0746	BKA	6 ✓	0		following ship
0750	Bonin cl.	1 ✓	0		
0754	W.T.S.	2 ✓	N		lt. ph.
0755	Bonin cl.	1 ✓	N		
0800	W.T.S.	11 ✓	N		lt ph.
0800	L.A.	1 ✓	0		} one sweep of horizon
0800	B.F.a	6 ✓	0		
0800	Bonin cl.	2 ✓	N		
0804	W.T.S.	8 ✓	N		} Horizon Sweeps
0808	W.T.S.	9 ✓	N		
0810	Bonin cl.	1 ✓	N		lt ph. - cumulative
FF 0814	W.T.S.	22 ✓	0		} lt ph. feeding.
0819	W.T.S.	3 ✓	N		
0827	W.T.S.	3 ✓	N		lt ph.
0832	W.T.S.	3 ✓	N		lt ph.
0840	W.T.S.	1 ✓	N		lt ph.
0841	Bonin cl.	1 ✓	SE		lt ph.
0843	W.T.S.	1 ✓	SE		lt ph.
0843	W.T.S.	1 ✓	N		lt ph.
0850	L.A.	1 ✓	0		} same bird as 0800 sighting
0855	Bonin cl.	1 ✓	N		
0900	W.T.S.	1 ✓	S		lt ph.



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

0800-1000 - Tux
1000-1200 - Thompson

SPECIMEN
or

LEEWARDS

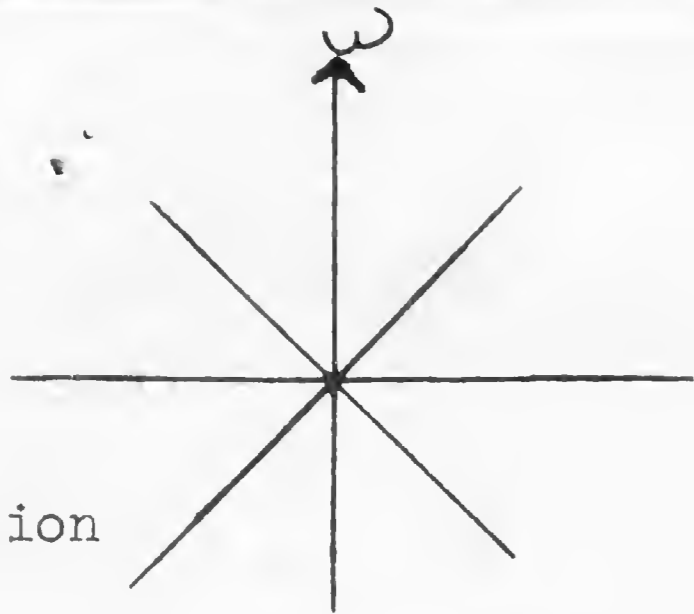
Date 27 MAY '67
Pg. # 3

LT 2087

flock

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0906	B.F.A.	1 ✓	⊙		Circling ship.
0912	Bonin. cl.	1 ✓	SW		
0913	Sooty T.	1 ✓	W		adult.
0917	Bonin cl.	1 ✓	E		
0920	Laysan Alb.	2 ✓	⊙		
0928	W.T.S.	1 ✓	NW		lt ph.
0928	Bonin cl.	1 ✓	NW		
0930	B.F.A.	3 ✓	⊙		following ship.
0933	Laysan Alb.	2 ✓	⊙		
0935	Bonin cl.	2 ✓	SE		
0937	W.T.S.	2 ✓	W		lt. ph.
0941	Bonin cl.	1 ✓	S		
0941	W.T.S.	1 ✓	S		lt ph.
0949	W.T.S.	1 ✓	S		lt ph.
0955	Laysan Alb.	1 ✓	⊙		lt ph.
0955	W.T.S.	1 ✓	S		lt ph.
1000	W.T.S.	1 ✓	W		2+
1003	W.T.S.	2 ✓	S		2+
1007	B.I.P.	1 ✓	S		
1009	W.T.S.	1 ✓	NE		2+
1010	B.I.P.	1 ✓	S		
1014	Laysan A	1 ✓	SE		
1015	"	1 ✓	SE		
1016	B.I.P.	1 ✓	S		
1018	Laysan A	1 ✓	E		
1019	Laysan A	1 ✓	N		
1020	W.T.S.	1 ✓	E		2+
1023	Laysan A	1 ✓	SE		
1029	W.T.S.	1 ✓	S		2+
1035	B.F.A.	1 ✓	S		
1036	Sooty Terns	2 ✓	N		70°
1037	B.I.P.	1 ✓	S		
1044	Laysan A	1 ✓	SE		
1046	"	1 ✓	N		
1048	B.I.P.	1 ✓	N		
1049	W.T.S.	1 ✓	S		LT
1050	W.T.S.	1 ✓	S		
1052	B.I.P.	1 ✓	N		

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

1000-1200 Thompson

1200-1400 Tux

1400-1600 Thompson

SPECIMEN
or

Journal

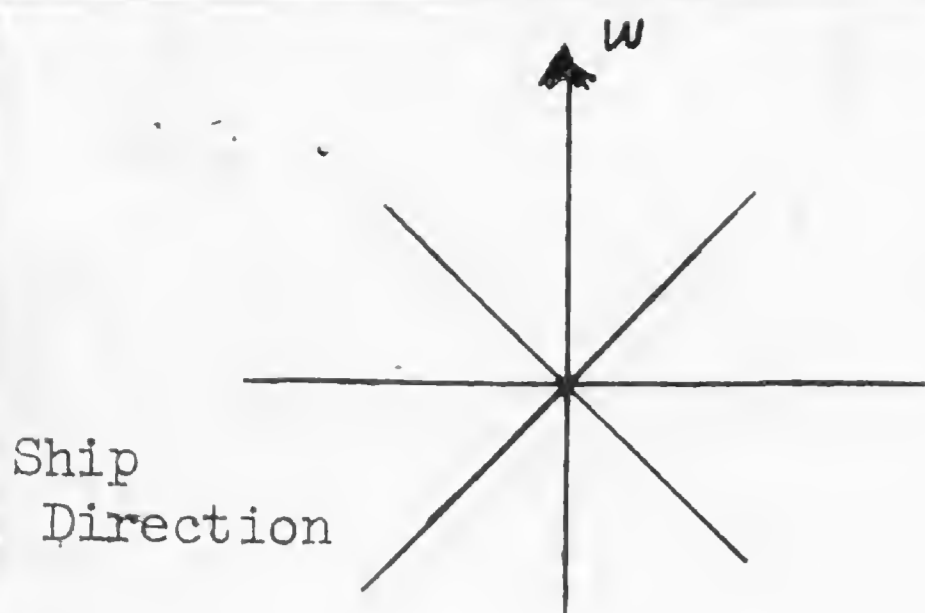
Leewards

LT 2087

Date *27 MAY 1967*

Pg. # *4*

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1055	Laysan A	1 ✓	N		
1106	B.I.P.	1 ✓	E		
1113	S.T.	2 ✓	S		ad.
1114	W.T.S.	1 ✓	S		2t.
1116	Laysan A.	1 ✓	N		
1118	Laysan A	1 ✓	S		
1120	B.I.P.	1 ✓	SE		
1138	WRSP	1 ✓	⊙		? Leach's
1140	Laysan A	1 ✓	S		
1156	W.T.S.	4 ✓	⊙		Lt. ph.
1200	W.R.S.P.	1 ✓	⊙		
1207	Bonin Is.	1 ✓	S		
1210	W.T.S.	2 ✓	SE		lt. ph.
1220	W.T.S.	1 ✓	W		lt. ph.
1224	Arctic T.	1 ✓	N		adult.
1225	W.T.S.	2 ✓	⊙		lt. ph.
1230	W.T.S.	1 ✓	NE		lt. ph.
1233	Bonin Is.	1 ✓	⊙		" "
1238	W.T.S.	1 ✓	S		lt. ph.
1245	W.T.S.	2 ✓	N		" "
1250	W.T.S.	2 ✓	⊙		" "
1254	Laysan	1 ✓	⊙		" "
1304	W.T.S.	4 ✓	S		lt. ph.
1305	B.F.A.	3 ✓	⊙		following ship.
1310	WTS	1 ✓	N		lt. ph.
1318	WTS	2 ✓	N		" "
1337	WTS	1 ✓	W		" "
1355	WTS	1 ✓	N		" "
1356	R.T.T.B.	1	W		ADULT.
1408	WTS	1 ✓	S		OK
1409	B.F.A.	1 ✓	W		
1415	Laysan A	1 ✓	SE		
1433	Laysan A	1 ✓	W		
1435	W.T.S.	1 ✓	S		2t.
1439	Laysan A	1	NN		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

1400-1600 Thompson
1600-1800 - Tux
1800-55 - THOMPSON

Date 27 MAY 1967
Pg. # 5

SPECIMEN
or

Diurnal
LT 2087
leeward

TIME SPECIES # DIR. BAND NO. REMARKS

1445	S.T.	1	⊙		AD.
1446	Laysan A	1	a		Following Tug
1530	Laysan A	1	⊙	N	
1550	S.T.	1	E		AD.
1609	W.T.S.	1	⊙		
1641	Sooty T.	1	W		adult.
1645	W.T.S.	2	⊙		lt ph.
1646	SKUA	1	W		
1650	B.F.A.	2	⊙		} following ship.
1650	Laysan A	2	⊙		
1717	F.T.	1	⊙		feeding
1723	W.T.S.	2	W		lt ph.
1728	W.T.S.	2	⊙		" "
1748	Fairy T.	1	⊙		seen at a distance between 2087 & 2086 - approx - 2 miles out judged in relation to other tug.
1800	Laysan A.	1	⊙		} Following ship.
1800	B.F.A.	2	⊙		
1842	Laysan A	1	a		Following - total of 2
1842	W.T.S.	2	N		lt
1900	W.T.S.	1	N		lt
1927	BFA	3	X		Cannibal dump over - only one BFA following ship at the time - 3 BFA 1 Laysan came to the junk before it disappeared out of sight.
1927	Laysan A	1	X		
1928	W.T.S.	1	SW		lt.
1945	W.T.S.	1	W		lt
1952	B.I.P.	1	NE		
2021					Close observation

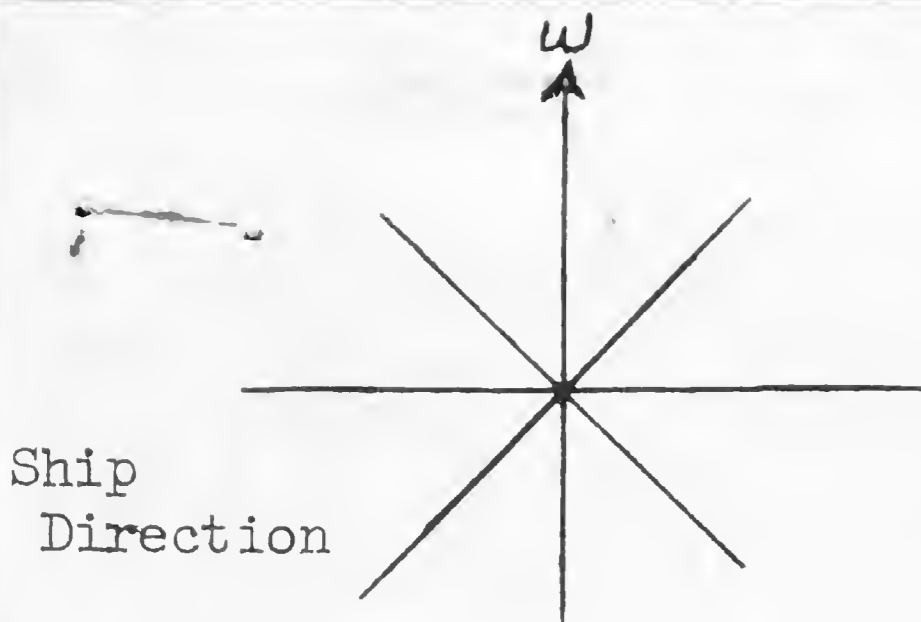
LA	37✓
BFA	34✓
WtSh	175✓
Xmas Isl Shear	1✓
BEP	35✓
WRSP	2✓
Bulwer	1✓
RFB	1✓
RTTB	1✓
ST	22✓
FT	2✓
Sterna	1✓
Arctic Skua	1✓
SKua	1

314

2 flashes

27 May

2087



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

SR-800 Tux

Date 28 MAY '67
Pg. # 1

SPECIMEN
or

LEEWARD IS
LT2087

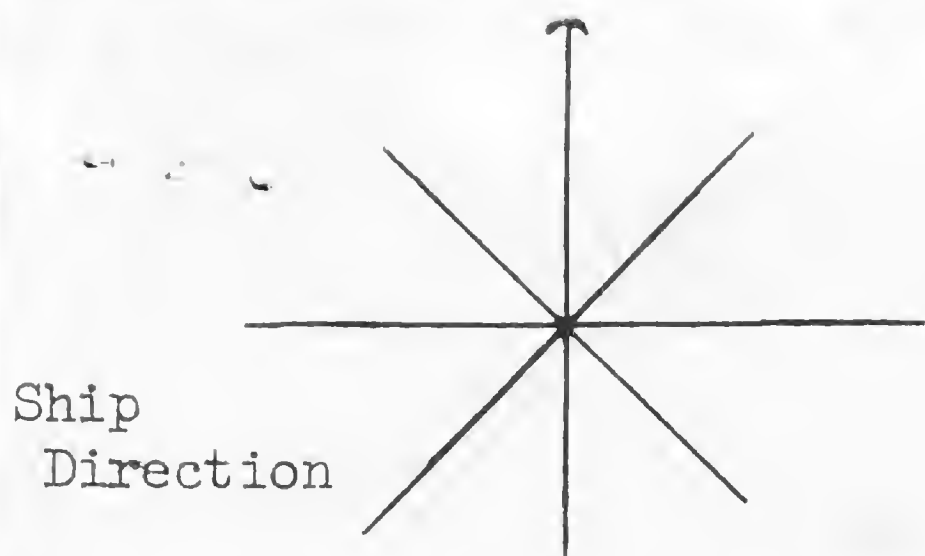
TIME SPECIES # DIR. BAND NO. REMARKS

	0647					SUNrise Begin obs. - rain at S.R.
	0650	W. T.S.	3✓	⊙		lt ph
	0651	B.F.A.	1✓	⊙		following ship.
	0657	W. T.S.	6✓	⊙		lt ph - 1 sweep of horizon
T.P.	0700	W. T.S.	3✓	W		lt ph.
	0701	Sooty T.	7✓	E		adults
	0702	Laysan Alb.	1✓	⊙		
	0704	W. T.S.	6✓	⊙		one sweep - lt ph
	0705	Sooty T.	1✓	E		adult.
	0707	" "	2✓	E		"
	0711	" "	1✓	E		"
	0713	W. T.S.	4✓	⊙		lt ph.
	0714	Ruddy Turnstone	5✓	E		
	0715	C. N. T.	1✓	E		
	0715	W. T.S.	1✓	W		lt ph.
	0720	W. T.S.	1✓	W		lt ph
	0720	R. T. B.	1✓	⊙		adult
	0720	CNT.	1✓	E		one horizon sweep
	0720	Fairy T.	1✓	NW		
	0722	Laysan Alb.	1✓	⊙		following LT 81
		B. F. A.	1✓	⊙		
✓	0724	CNT	4✓	E		
	0725	W. T.S.	2✓	⊙		lt ph.
	0726	Sooty T.	3✓	E		adults
	0730	" "	3✓	E		"
	0734	" "	3✓	E		"
as	0735	" "	4✓	E		"
	0738	Laysan	1✓	⊙		
		B. F. A.	1✓	⊙		
		W. T.S.	1✓	⊙		lt ph
		Sooty T.	5✓	⊙		ad. } one horizon sweep.
	0745	Sooty T.	8	⊙		adults - horizon sweep.
	0752	RTTB	2	⊙		ad.

Flocks

1 = 7

0958
0647
26.11.11



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:
0800-1000 Thompson

SPECIMEN

LT 2087

or

Leewards

Date 28 MAY 1967

Pg. # 2

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0800	Sooty Terns	6	⊙		Horizon Sweep.
0805	Laysan A	2	⊙		Horizon Sweep.
	F.T.	3	⊙		
	S.T.	8	⊙		
0810	ST.	3			Horizon Sweep.
	F.T.	4			
	BKA	1			
0812	W.T.S.	3	⊙		Lt
0815	HNT	2	⊙		
0816	F.T.	2	S		
0820	HNT	11	E		
0825	W.T.S.	2	⊙		Horizon Sweeps
	F.T.	1	⊙		
0830	W.T.S.	2	E		Lt.
0831	H.N.T.	5	⊙		
0832	FT	5			
	Laysan A	3			Horizon Sweep.
	Wedgetail	3			
	ST.	4			
0840	FT	2			
0841	HNT	2			
0843	ST.	4	E		Ad.
0845	W.T.S.	2	S		Lt.
	Laysan A	3			
0846	HNT	1			
0850	G Frigate	3	SW		
0853	BKA	10	⊙		→ Attracted to garbage dump by other TBs
0855	Laysan A	4			
	BKA	5			
	Laysan	3			Sweep at Sprall line
	CNT	1			
0856	ST	5+			
	W.T.S.	1	⊙		Lt
0858	GAT	1	⊙		Ad.
0900					closed observation off Pearl & Hermes

60 11 09

28 May

87

67
29
38

WtSL 27 ✓

13

BFA 3 ✓

16

Sooty Tern 29 ✓

38

Laysan Alb. 3 ✓

15

Ruddy Turnstone 5 ✓

Br Noddy 6 ✓

1

RTTB 1

2

WTern 1

17

1
75

total 0240

Great Frigate

3

Blk. Noddy

21

BB Tern

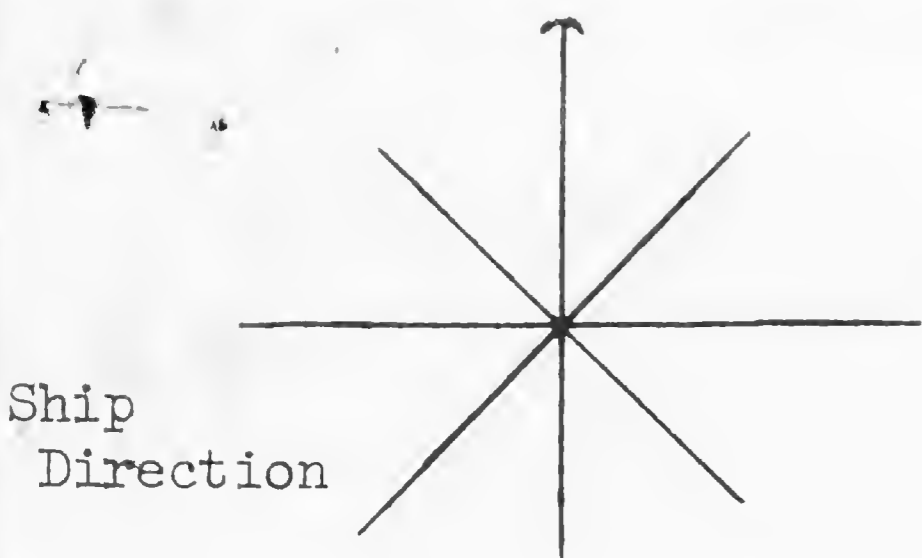
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127

$$\begin{array}{r}
 65 \quad 428 \\
 \quad 31 \\
 \hline
 \quad 562 \\
 \quad 565
 \end{array}$$

$$\begin{array}{r}
 128 \\
 135 \\
 \hline
 263
 \end{array}$$

$$\begin{array}{r}
 269 \\
 75 \\
 \hline
 60 \\
 404
 \end{array}$$



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN

or

DIR. BAND NO. REMARKS

OBSERVERS:

0900-1100 Thompson

Date 30 May 1967

Pg. # 1

Diurnal

LT 2087

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0900					open observations, similar area midday
0901	FT	1✓	W		
0902	W.T.S.	1✓	E		2+
0903	Laysan A.	3✓	⊙		
0904	ST	1✓	W		Ad.
0906	BFA	1✓	⊙		following ship
0907	ST	2✓	W		Ad.
0908	FT	1✓	W		
0909	RTTB	1✓	W		
0910	FT	2✓	⊙		on H2O
0912	BFA	1✓	⊙		Feeding
0920	ST	2✓	⊙		following ship
0922	B.P.P.	1✓	W		Ad.
TF 0930	FT	1✓	W		
	ST	6✓	⊙		Ad.
0933	FT	3✓	E		
0934	New Zealand Shearwater	1✓	W		
0935	ST	2✓	W		Ad.
0936	Bulwer's	1✓	W		
0937	W.T.S.	1✓	W		2+
TF 0938	ST	6✓	W		Ad.
0939	FT	2✓	E		
0942	Sooty shr.	1✓	W		white wing lining
TF 0943	ST	13✓	W		
0945	ST	1✓	W		Ad.
0950	BFA	4✓	⊙		following Ad ne TUS
1000	FT	1✓	⊙		
1006	FT	1✓	⊙		
1007	Laysan A.	3✓	⊙		Feeding
1011	W.T.S.	2✓	⊙		
1012	ST	4✓	SE		2+
1013	W.T.S.	1✓	W		Ad.
1015	ST	1✓	SW		2+
1017	FT	1✓	N		Ad.
1020	ST	3✓	W		
1024	ST	3✓	W		Ad.

LA - 16

BFA - 30

45 W.T.S. - 61

N.Z.S. - 1

S.S. - 1✓

Bulwer's - 1✓

BIP - 1✓

Small Plover - 1✓

RTTB - 1✓

GF - 1✓ Ad.

BFB - 2✓ Ad.

RFB - 1✓ Ad.

66, 13, 6 17 ST - 171✓

67 FT - 113✓

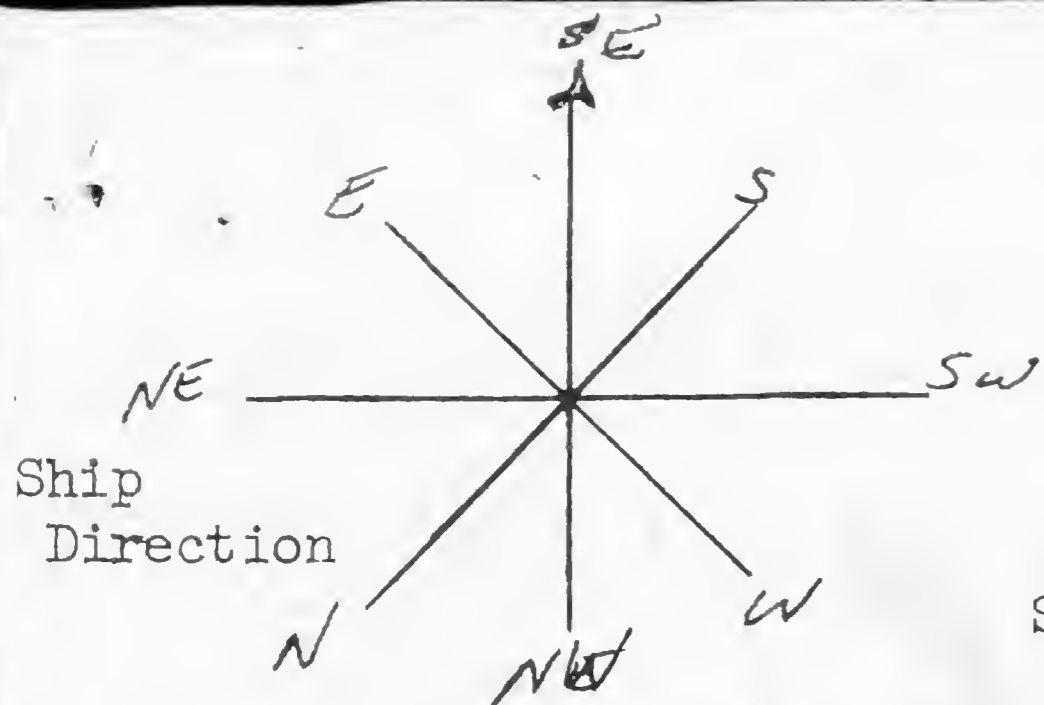
CNT - 1✓

29 HNT - 31✓

GBT - 5✓

RTMstone - 3✓

441



Ship
Direction

SMITHSONIAN INSTITUTION

DIVISION OF BIRDS

AT SEA DAILY LOG - E Leeward Is.

SPECIMEN
or

Lt 2087
Diurnal

OBSERVERS:

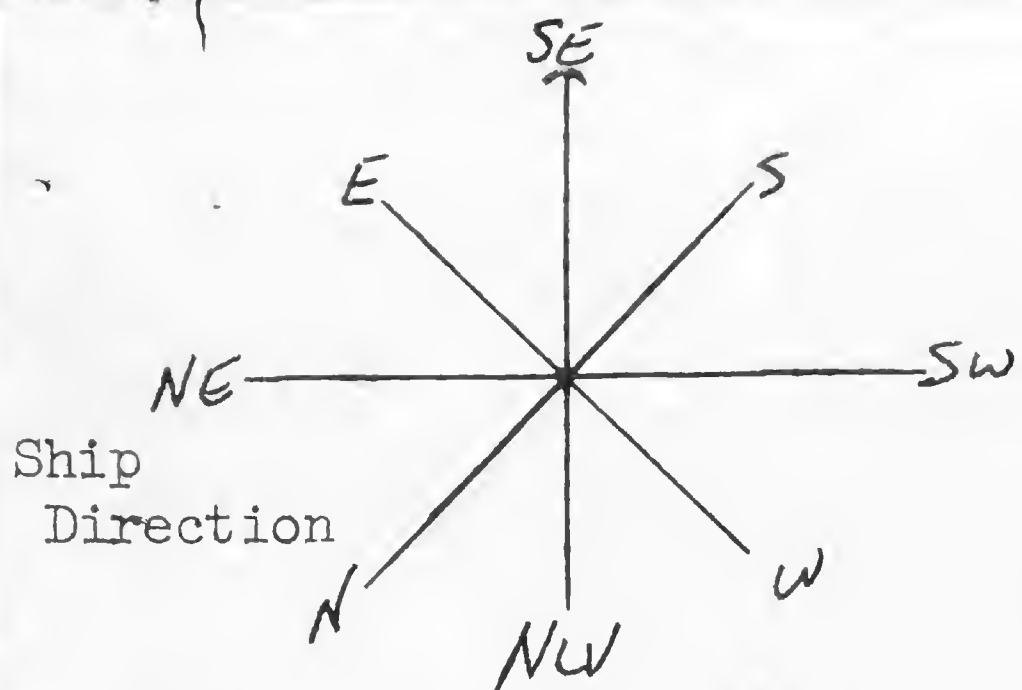
0900-1100 Thompson

1100-1300 Tux

Date 30 May 1967

Pg. # 2

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
TF 1031	FT	1 ✓	Q		feeding
1032	ST	2 ✓	N		
1041	Small Pterodroma	1 ✓	W		Ad's
1042	FT	1 ✓	Q		not a BWP ? BWP
1048	S.T.	2 ✓	W		
1055	F.T.	1 ✓	W		Ad's.
1103	F.T.	1 ✓	NE		
1105	B.F.A.	5 ✓	Q		following ship.
1106	F.T.	1 ✓	NE		
1107	S.T.	2 ✓	NW		adults.
1109	W.T.S.	1 ✓	SE		lt ph.
1115	F.T.	1 ✓	W		
1116	B.F.A.	2 ✓	Q		following ship - total ac 7
1118	RT	3 ✓	Q		
1120	ST	2 ✓	W		Ad
1121	FT	2 ✓	W		
1130	W.T.S.	1 ✓	W		Ad
1131	S.T.	3 ✓	W		Ad's.
1135	F.T.	1 ✓	E		
1136	W.T.S.	1 ✓	NE		Ad
1137	ST	3 ✓	W		Ad.
1140	Laysan A.	2 ✓	SE		
1142	F.T.	1 ✓	Q		
1150	S.T.	2 ✓	SE		adults.
1155	S.T.	1 ✓	Q		adult
	F.T.	4 ✓	Q		
1157	Gn. Frig.	1 ✓	Q		circling - adult ♀
1158	F.T.	1 ✓	Q		
1203	S.T.	1 ✓	Q		adult.
1206	F.T.	1 ✓	Q		feeding.
1215	S.T.	1 ✓	Q		adult
1215	F.T.	2 ✓	SE		
1220	W.T.S.	1 ✓	Q		
1234	F.T.	2 ✓	Q		lt ph.
	HNT	2 ✓	Q		



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

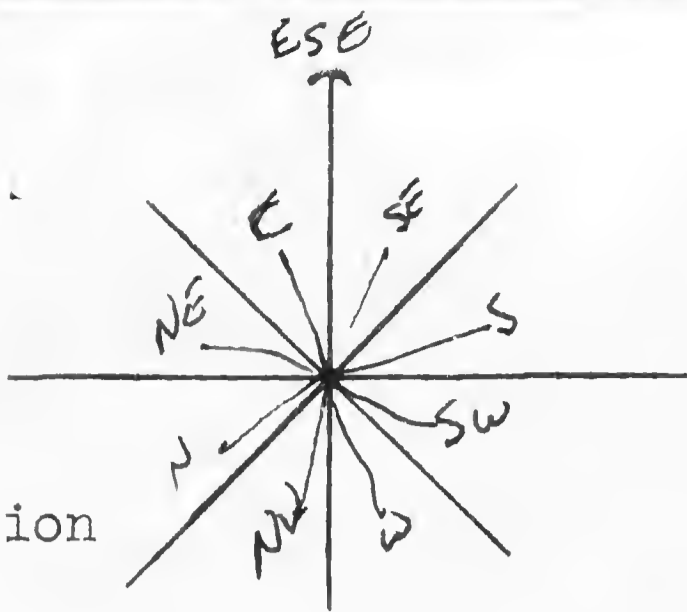
~~1100-1400~~ Tux
1400 - Thompson

Date 30 May 1967
Pg. # 3

SPECIMEN LT 2087
or LEEWARD IS

	TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
	1237	Sooty T.	4✓	SE		adults.
	1243	W.T.S.	1✓	SE		lt. ph.
	1246	Sooty T.	3✓	NE		adult.
	1254	Fairy T.	1✓	⊙		
	1258	Sooty T.	3✓	NE		adults
TF	1302	W.T.S.	1✓	SE		lt ph.
	1303	Fairy T.	5✓	NE		traveling
TF	1307	Sooty T.	2✓	SE		adults } traveling
		H.N.T.	4✓	SE		
	1311	Sooty T.	1✓	NE		adult
	1315	W.T.S.	1✓	NE		lt ph.
FF	1320	Fairy T.	60✓	⊙		
		Sooty T.	80✓	⊙		adults. } feeding.
		H.N.T.	25✓	⊙		
		W.T.S.	45✓	⊙		lt ph.
		B.F.B.	1✓	⊙		adult
		Laysan A.	3✓	⊙		
	1326	B.F.α.	6✓	⊙		} following ship.
		Laysan A.	5✓	⊙		
	1335	B.F.B.	1✓	SE		adult.
	1336	Fairy T.	1✓	E		
		Sooty T.	2✓	E		adults
	1340	W.T.S.	1✓	SE		lt ph.
	1345	Sooty T.	1✓	S		adult
T.F.	1345	Sooty T.	6✓	E		adults } traveling
		Fairy T.	1✓	E		
	1350	Common N.	1✓	E		
	1350	W.T.S.	1✓	SE		lt ph.
	1355	Fairy T.	2✓	SE		
	1400	W.T.S.	1✓	⊙		lt ph.
	1410	ST	1✓	⊙		
		FT	1✓	⊙		
	1415	W.T.S.	1✓	N		2+
	1422	FT	1✓	⊙		

LA
BFA
WTS
W.S.
SS
RTB
RFB



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Thompson

SPECIMEN
or

Leewards Island
LT 2087

Date *30 MAY 1967*
Pg. # *4*

TIME SPECIES # DIR. BAND NO. REMARKS

1425	GBT	2✓	N		
1427	FT	1✓	G		feeding
1428	GBT	1✓	N		
1439	K.T.	1✓	S		
1442	BKA	11✓	CO		Behind TUG
1443	RFB	1✓	SW		2+
1444	GBT	1✓	S		
1445	FT	1✓	W		
1457	GBT	1✓	N		Ad
	ST	1✓			Ad.
	FT	1✓			
1500					Watch moved to Starboard Quarter Deck
1503	FT	1✓	CO		
1510	FT	1✓	NNE		
1515	FT	1✓	SSW		
1520					Reet in sight, close observation

H9 120
6796
30
45

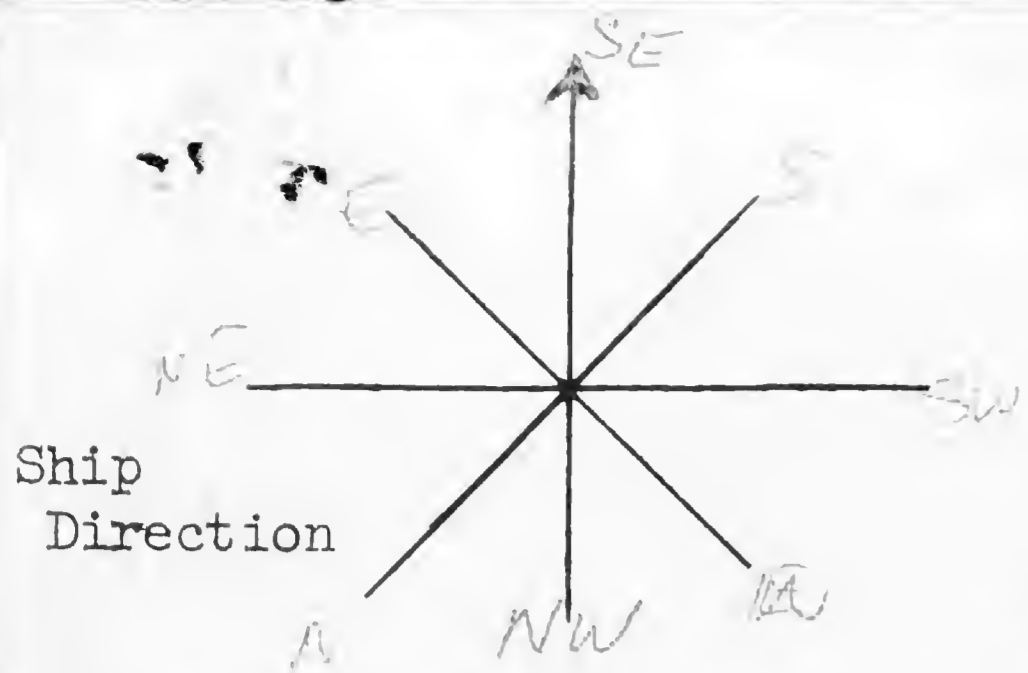
216
261

30 May

midway -

Reel of film
~~Lisinski~~

Laysan Albatross	6	2	8		16 ✓
B-F Albatross	6	7	6	11	30 ✓
W-T Shear	5	4	52		61 ✓
BIP	1				1 ✓
Bulwer's Shearwater	1				1 ✓
Bulwer's Pet.	1				1 ✓
Sooty Tern	44	23	103	1	171 ✓
RTTB	1				1 ✓
Fairy Tern	13	21	72	7	113 ✓
Sooty Shear	1				1 ✓
Green Frigate	1	1			1 ✓
Sam. Pterodroma	1	1			1 ✓
Blk Noddy	1	20	29	-	31 ✓
Ruddy Turnstone	3				3 ✓
BFB			2		2 ✓
Common Noddy			1		1 ✓
G-B Tern				5	5 ✓
RFB				1	1
					<hr/> 441



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

0830 - 1200
1030 - 1200 Thompson

Date 12 JUNE '67
Pg. # 1

SPECIMEN LT 2087
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0830					open OBS.
0835	Sooty T.	1	NW		adult.
0838	BFA	3			following ship
0840	W.T.S.	1			lt. ph.
0841	Sooty T.	4			adults.
0843	Sooty T.	3			adults
TF 0844	Sooty T.	6	SE		adults traveling
TF 0845	" "	10	N		adults traveling
0846	W.T.S.	1			lt ph
0855	W.T.S.	2	W		lt ph
TF 0900	Sooty T.	10	S		adults
0901	W.T.S.	1			lt ph
0902	" "	2	SE		lt ph
0907	Sooty T.	1	NW		adult
0910	G.B.T.	1			
15 0915	W.T.S.	3	S		lt ph
0919	Ruddy T.	1			
0920	W.T.S.	2			lt ph
0921	Sooty T.	2			adults.
0933	BFA	1			
TF 0935	WTS	15	SE		lt ph.
0950	BFA	2			following ship
0952	W.T.S.	2			lt ph
0957	Laysan Al.	4			adults
1000	Sooty T.	4	NW		adults
1002	W.T.S.	1	NW		lt ph
1004	" "	1	SE		" "
1013	Sooty T.	2			adults
1015	WTS	2			lt ph
1020	WTS	2			lt ph
1025	RFB	2			2+
1030	ST	2			2+
1031	WTS	1			2+
TF 1033	ST	6	NW		adults

LA - 1

BFA - 6

15 W.T.S. 57 64

RTTB - 1

RFB - 3 summed 2nd LT

GF - 1 summed

RT - 1

6, 10, 10, 9, 5, ST - 99, 105
7, 8, 7, 5

G.B.T. - 1

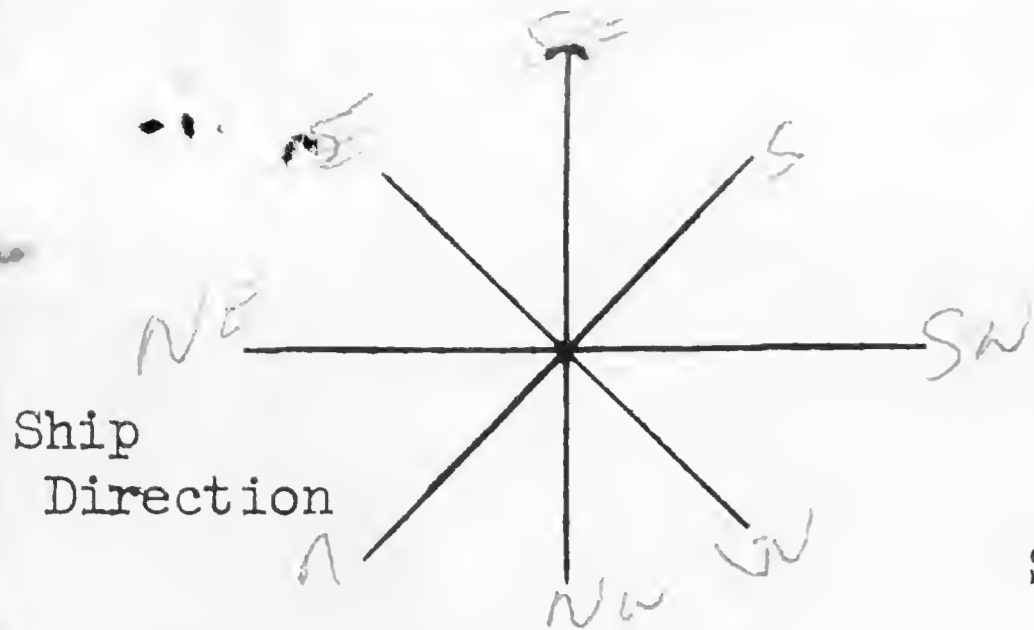
HNT - 2

Flocks 10-79

172

108.
64
172

33



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

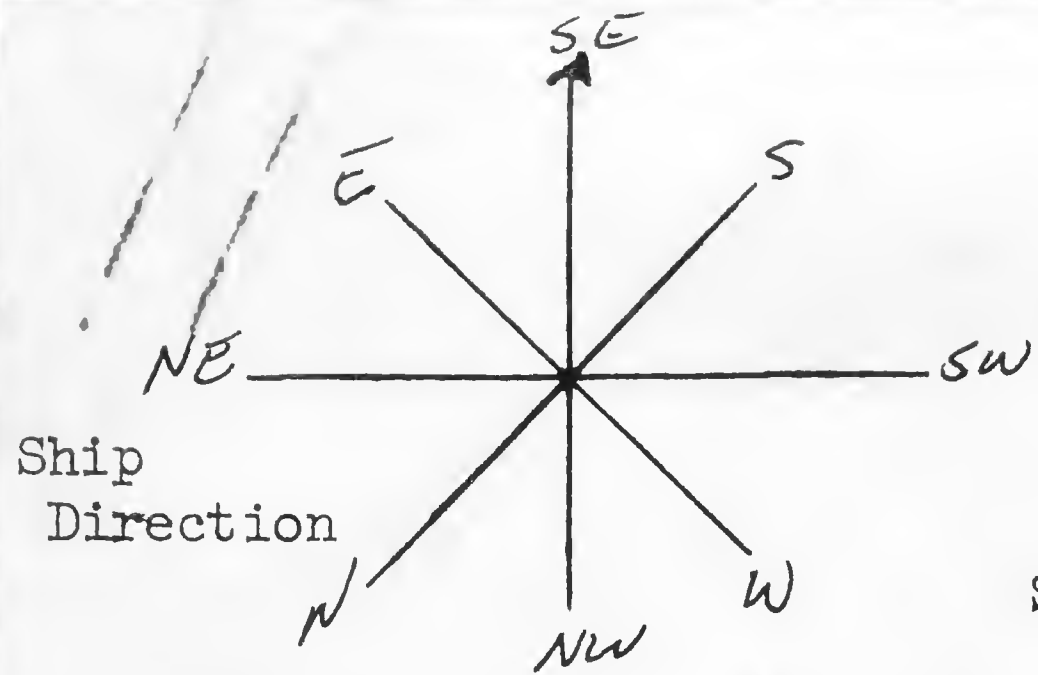
SPECIMEN LT 2087
or

OBSERVERS:
1030-1205 Thompson

Date 12 MAY 1967
Pg.# 2

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
TF 1040	ST	5	SE		Ad
1041	WTS.	1	CO		2+
1043	G.F. gull	1	NW		Sub Ad. - 2
TF 1045	ST	7	SE		Ad
1046	ST	2✓	NW		Ad
1047	WTS	3	CO		2+
1050	WTS	4	CO		Ad
1051	ST	3✓	CO		Ad
1054	WTS	2	CO		2+
1057	ST	2✓	CO		Ad
1058	RFB	1	NW		
1059	WTS	3	CO		2+
1100	ST	3✓	CO		Ad
TF 1101	ST	8	NW		Ad
	HNT	2			
TF 1102	ST	7	NE		Ad
TF 1103	ST	5	NE		Ad
1105	RFB	1	CO		Sub Ad. - 2+
1107	ST	2✓	NW		Ad
1113	WTS	3✓	CO		2+
1115	ST	4	NW		Ad
1116	WTS	2	CO		2+
1120	WTS	3	CO		2+

35
37
27
99



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

1300-1500 - TUX
1500-1700 - CHVIS
1700-1900 - TUX
1900-55 - CHVIS

Date 13 JUNE '67
Pg. # 1

SPECIMEN
or

LT 2087

Leewards 19

TIME SPECIES # DIR. BAND NO. REMARKS

1300	W.T.S.	2 ✓	⊙		ltph open obs.
1305	G.B.T.	2 ✓	N		
1312	Sooty T.	1 ✓	E		ADULTS
1325	Haw. Noddy	1 ✓	SE		ADULT.
1333	Sooty T.	1 ✓	⊙		ADULT.
1340	B.F.B.	1 ✓	⊙		Following ship.
1348	R.F.B.	1 ✓	NW		Light phase adult
1350	Sooty T.	2 ✓	⊙		ADULTS
1350	Skua	1 ✓	⊙		harassing TERNS
1419	Sooty T.	1 ✓	NW		ADULT.
1430	Sooty T.	1 ✓	SW		ADULT.
1445	W.T.S.	1 ✓	SE		Light phase
1458	Sooty T.	1 ✓	SE		ADULT.
1515	BHA	1 ✓	⊙		Following ship
1530	W.T.S.	1 ✓	⊙		2+
1605	Bulwer's	1 ✓	NW		
1607	Sooty Terns	4 ✓	⊙		
1614	Sooty Tern	1 ✓	SW		Ad.
1628	Bulwer's P	1 ✓	NW		
1629	RUFF	1	⊙		Sitting on the deck / Red RUFF
1637	Bulwer's	1 ✓	SE		
1644	Sooty Tern	2 ✓	NW		Ads
1656	Newell's	1 ✓	NW		
1704	W.T.S.	1 ✓	N		2+
1712	MEXICAN JAY	1	S		very easily Told - IT HAD A WET BACK AND ITS BREATH SMELLED OF TORTILLAS!!
1750	W.T.S.	3 ✓	⊙		LTph.
1759	Sooty T.	4 ✓	SE		ADULTS.
1806	R.F.B.	1 ✓	⊙		adult ltph
1814	Gr. Frig.	1 ✓	⊙		ADULT.
1834	W.T.S.	1 ✓	NW		ltph
1835	Sooty T.	2 ✓	NE		ADULT.
1850	B.F.B.	2 ✓	NE		ADULTS.
1851	W.T.S.	1 ✓	SE		LTph.
1905	Sooty Terns	2 ✓	NW		Ads.

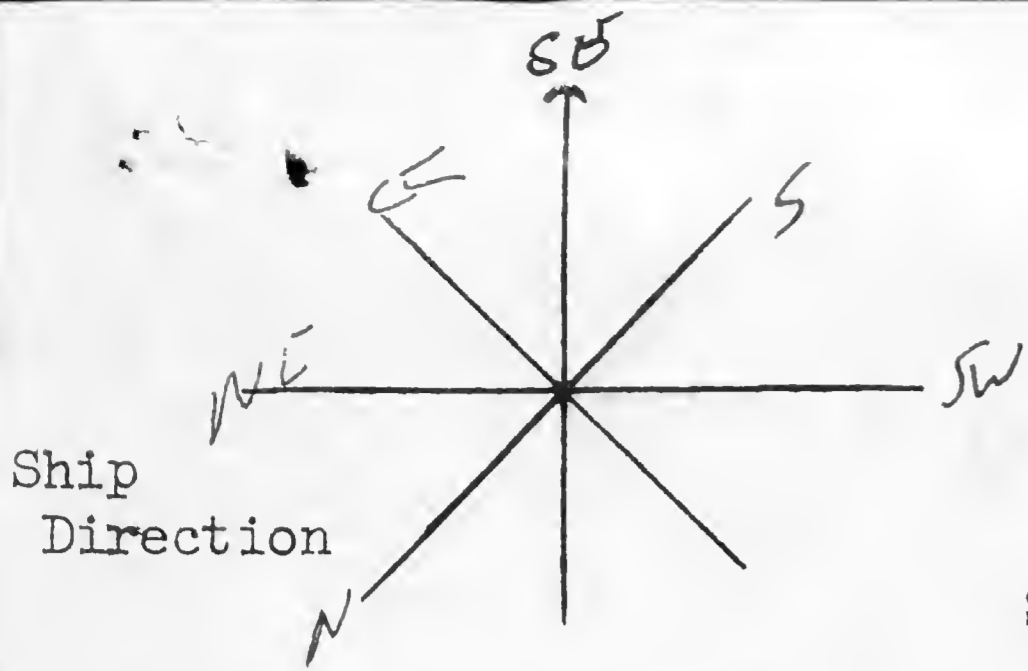
LA -
✓BFA - 2
✓W.T.S. - 10 LT
✓Newell's - 1
✓RFB - 2 ADLT
✓BFB - 2
✓G.F. - 1
✓Bulwer's - 2
✓S.T. - 20
✓Skua - 1
✓HNT - 1
✓GST - 2

no flocks

discarded
Hopefully other obs are
Reliable!!

BFA	2 ✓	
Wt Shear	10 ✓	LT
Newells	1 ✓	
RFB	2 ✓	Ad Lt.
BFB	2 ✓	Ad
HF	1 ✓	
Bulwer.	3 ✓	
Sooty tern.	22 ✓	
HNT	1 ✓	
GBT	2 ✓	
Skua	1 ✓	

47



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

1300-1500 - TUX
1500-1700 - CHRIS
1700-1900 - TUX
1900-55 - CHRIS

2T 2087

Date 14 JUNE
Pg. # 1

LEEWARDS 19

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

1300	BFB	1	SE		open also.
1305	RFB	2	SE		sitting on H ₂ O
1306	Bulwer's	2	SE		immatures
1307	WTS.	1	SE		Light phase
1317	WTS	1	SE		" "
1322	Brown B.	1	SE		adult ♀
1323	Sooty T.	1	SE		adult
1324	Bulwer's	1	SE		
1325	Bulwer's	1	SE		
1345	RFB	1	SE		
1346	Brown B.	1	SE		adults
1347	Bulwer's	1	SE		
1348	Fairy T.	1	SE		feeding
1350	BFB	3	SE		adults, sitting on water.
1355	Sooty T.	1	SE		adult
1358	RFB	1	SE		adult LT. ph.
1359	Bulwer's	1	SE		
1403	WTS	1	SE		LT ph.
1403	Sooty T.	1	SE		adult.
1407	Sooty T.	1	SE		adult.
1412	Bulwer's	1	NW		
1440	RFB	1	NW		LT. ph. adult.
1443	WTS	1	SE		LT ph.
1500	RFB	1	NE		AD LT.
1504	Newell's	1	SW		
1510	RFB	1	SE		AD LT
1511	ST	1	SE		AD
1512	WTS.	1	SE		
1525	RFB	1	SE		AD LT
1526	ST	1	NE		AD
1527	Bulwer's	1	N		
1534	Bulwer's	1	N		
1535	WTS.	1			
1538	ST	2	N		on H ₂ O, LT
1540	Bulwer's	1	NW		AD.
1543	Bulwer's	1	NW		
1546	WTS.	1	SE		AD LT

30 (12) W.T.S. 106 ✓

Newell's 26 ✓

5 Skuas 1 ✓

Bulwer's 27 ✓

2 BKB - 6 ✓

25, 1 RFB - 35 ✓

12, 2 BB - 16 ✓

20, 2 ST 111 ✓

10 GBT - 10 ✓

FT - 1 ✓

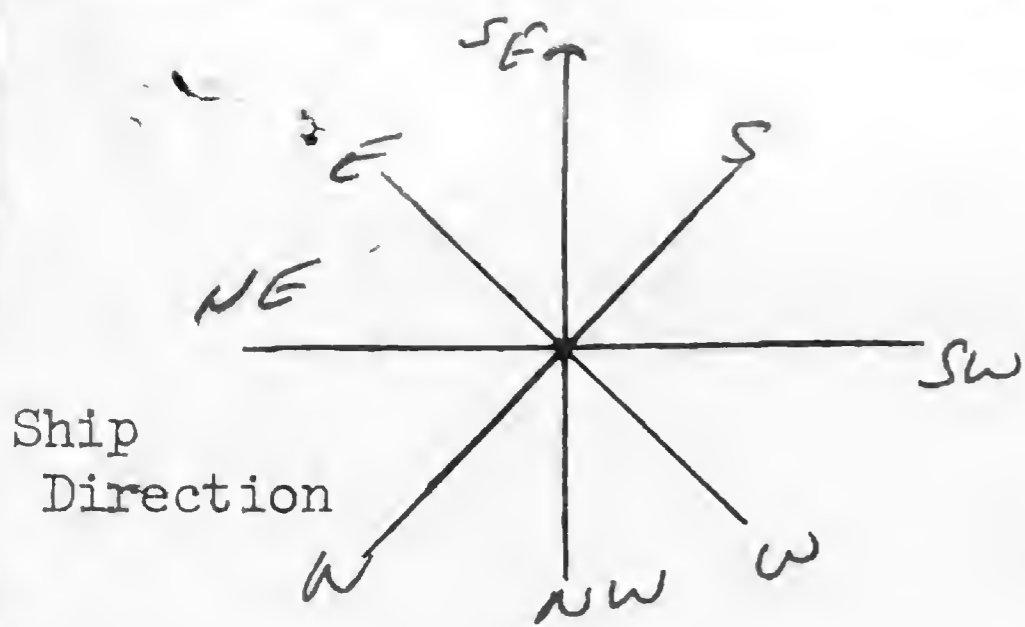
CNT - 29 ✓

Planks - 4/162

368

38
406

406



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

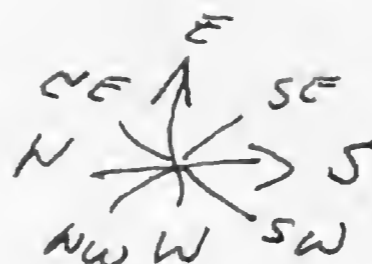
Thompson

Date ^{June} 14 MAY 1967
Pg. # 2

SPECIMEN
or

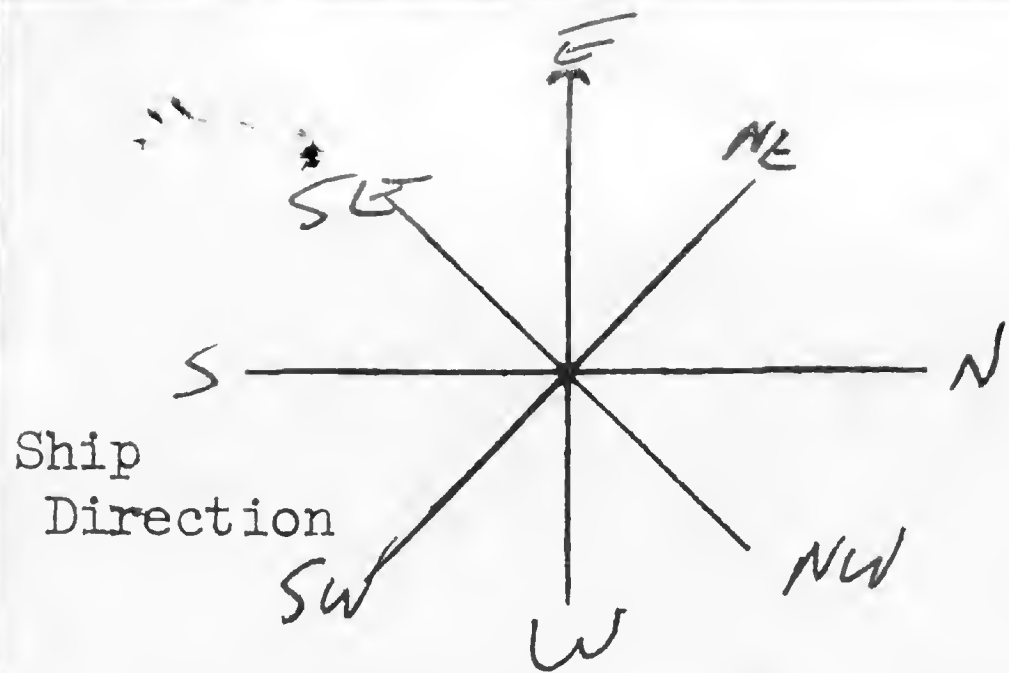
LT 2087
Leeward #19

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1550	Bulwer's	2	NE		
FF 1551	W.T.S.	1			
1555	RFB	25 ± 3			18 Ad LT, 6 Imm } Fish, Tuna jumps
	CNT	30 ± 5			
	Newell's	8			
	W.T.S.	30 ± 5			
	T.B.	12			
	S.T.	20 ± 5			
1604	CNT	2			
	ST	2			
TF 1610	CNT	8	SW		
1612	Newell's	1	N		
1614	ST	2	NW		Ad
1624	ST	4			
1625	W.T.S.	2			LT
1630	CNT	3	N		
	ST	1			Ad
1631	Bulwer's	2	N		
1632	ST	1	E		
1633	ST	1	S		
1636	CNT	1	NW		
1637	Bulwer's	1	NW		
1638	Newell's	1	SW		
1639	Bulwer's	1	NW		
1640	RFB	1	N		Ad LT
1642	ST	4	SW		Ad
1643	Bulwer's	1	NE		
1646	ST	11			Ad
	W.T.S.	1			PK phase
1650	S.T.	1			Ad. feeding
FF 1654	ST	2	W		Ad
	BB	2			on H ₂ O
	RFB	2			"
	RFB	1			"
	GBT	10			
	Whale sp.				← very small Fin 30'



28
17
12
125
162

29
34
36
23
34
137



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

1700-1900 - Tux
1900 - SS Chris

Date ¹⁴ June 1967
Pg. # 3

SPECIMEN
or

LT 2087
leeward

TIME - SPECIES # DIR. BAND NO. REMARKS

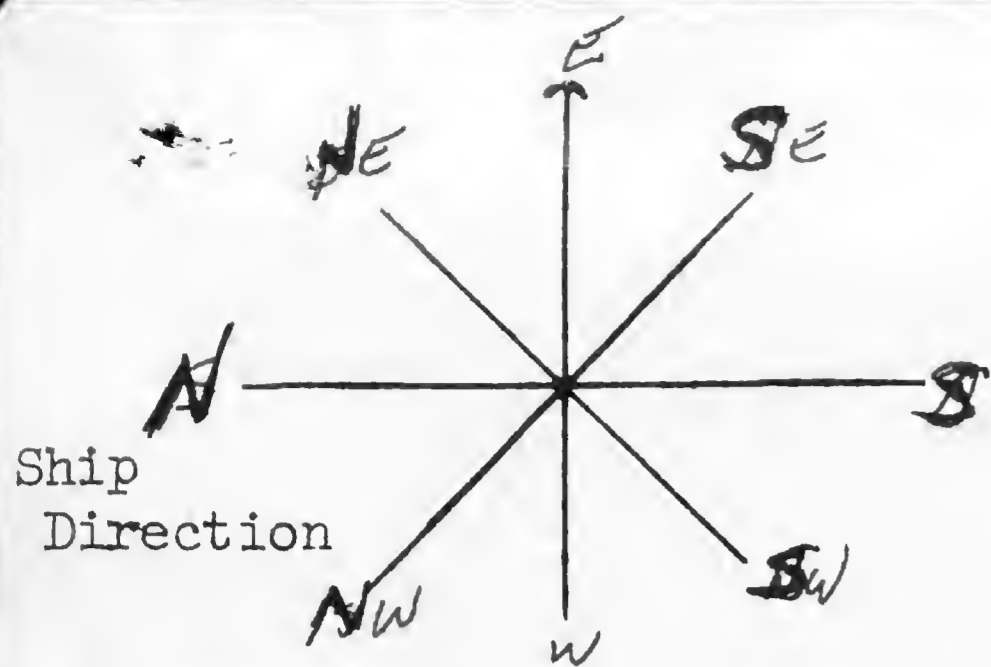
1700	W.T.S.	1	○		Lt. ph.
1701	Sooty T	2	○		ADULTS
1703	Sooty T.	4	SW		adults
1703	W.T.S.	4	○		Lt ph
1705	Sooty T	3	○		ADULTS
1707	W.T.S.	3	○		2 LT, 1 DK ph.
1708	Sooty T.	4	○		ADULTS
1711	W.T.S.	2	○		LT ph.
1713	C. Noddy	1	N		ADULTS
1713	Sooty T.	3	N		SITTING ON H ₂ O
1715	Newell's	3	○		
1718	Newell's	1	○		
	W.T.S.	1	○		DK ph.
	C. Noddy	1	W		
1719	Sooty T.	2	NE		adults
1720	Bulwer's	1	○		
1721	Bulwer's	1	○		
1721	W.T.S.	1	○		Lt ph
1722	Sooty T.	2	N		ADULTS
1723	Newell's	1	NE		
1725	W.T.S.	2	○		LT. PH.
1726	Sooty Shearwater	1	NE		White under wing lining
1728	Sooty T.	4	○		ADULTS
1729	W.T.S.	1	○		LT. PH.
1730	Newell's	1	NE		
1733	Sooty T.	4	NE		ADULTS
1735	W.T.S.	1	SW		LT ph.
1738	Bulwer's	1	N		
1739	W.T.S.	1	W		Lt ph.
1741	W.T.S.	1	W		" "
1743	Sooty T.	3	NE		adults
1748	C. Noddy	1	NE		
1800	W.T.S.	12	○		21
1805	CNT	3	○		2T
1806	W.T.S.	4	○		AD
1807	S.T.	3	○		
1807	CNT	2	○		
1810	W.T.S.	8	○		2T - not a flock - sweep.

sightings all
WITHIN VISUAL RANGE
OF Niihau & Kauai

1809 6 mammals

Blunt
tail Black 18'-20' feet

Probably
Newell's
Shearwater



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

TUV - 1700 - 1900

Chris 1900 - 55

Date 14 June '67

Pg. # 4

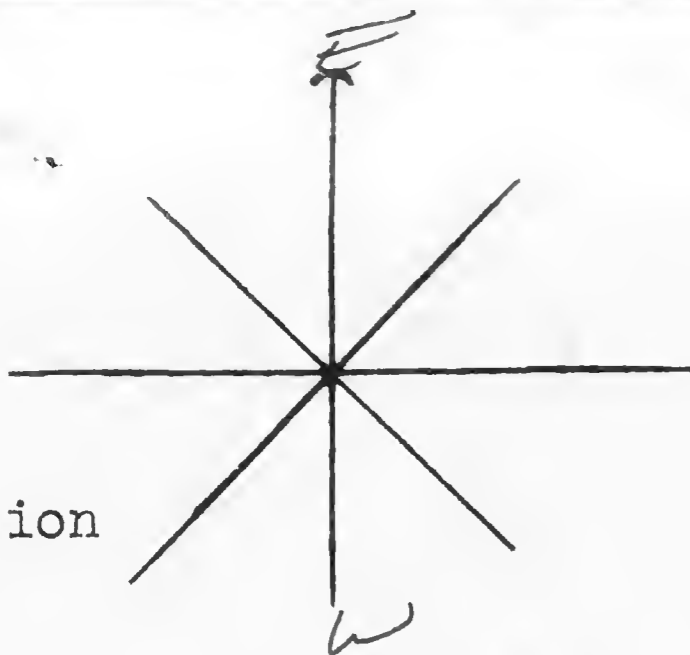
SPECIMEN
or

LT 2087

Leewards 19

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1824	Sooty T.	2			adult.
1826	Bulwer's	1			
1826	WTS	2	W		lt ph
1827	Bulwer's	1			
1830	Bulwer's	1	N		
1832	W.T.S.	1	O		lt. ph.
1833	Sooty T.	1	N		adult.
1834	W.T.S.	2	O		lt. ph.
1840	Sooty T.	3	NW		adults.
1840	Common Noddy	1	O		
1842	W.T.S.	2	N		lt. ph.
1843	Bulwer's	1	O		
1844	Newell's	1	O		
1846	W.T.S.	3	O		
1850	ST	4	W		IT
1854	Common Noddy	1	SW		
1855	WTS	1	N		lt ph
1856	ST	2	O		
1856	Newell's	1	NE		
1857	WTS	1	NE		lt ph
1858	WTS	1	O		lt ph
1900	Newell's	1	SE		
1901	CNT	1	S		
1902	WTS	1	SW		2T
1903	CNT	4	O		Sweep Cont
1905	W.T.S.	3	O		2T
1906	CNT	1	SE		
1907	ST	1	S		2T
1908	Bulwer's	1	E		
1909	Newell's	1	W		
1910	W.T.S.	1	W		OK
1911	W.T.S.	3	N		
1912	CNT	1	S		
1913	CNT	3	SW		
1914	Newell's	1	NE		

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 14 June '67
Pg.# 5

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

1915 S.T. 3 W AD

1916 C.N.T. 1 W

1917 W.T.S. 1 W

1918 C.N.T. 1 Q #63-245-- Blue streamer - B TLyson

1919 W.T.S. 1 W 2T

1920 Newell's 2 Q

1923 S.T. 3 S AD

1924 NEWELLS 2

1925 ST 1 W SITTING ON THE POT- ~~scribbled out~~
AD

1928 CLOSE OBSERVATION SUNSET

15

167
41
54
106

368